Headquarters
U.S. Army Armor Center and Fort Knox
Fort Knox, Kentucky 40121-5000
13 March 1998

*Fort Knox Reg 385-10

Safety

FORT KNOX FORCE PROTECTION PROGRAM

Summary. This regulation provides policy and guidelines concerning implementation of the U.S. Army Safety Program at the U.S. Army Armor Center (USAARMC) and Fort Knox.

Applicability. This regulation applies to all USAARMC and Fort Knox major activities, directorates, staff offices/departments, Fort Knox Partners In Excellence, and U.S. Army Reserve and National Guard Units supported by the Armor Branch Safety Office (ABSO).

Supplementation. Supplements are prohibited without prior approval from the ABSO.

Suggested Improvements. The proponent of this regulation is the ABSO. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commander, USAARMC and Fort Knox, ATTN: ATZK-S, Fort Knox, KY 40121-5000.

FOR THE COMMANDER:

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*This regulation supersedes USAARMC Reg 385-10, 6 June 1994.

Contents

CHAPTER 1
INTRODUCTION

1-1. Purpose. This regulation prescribes policies, procedures, and guidelines for implementation of the USAARMC and Fort Knox Safety Program.

1-2. References. Required and related publications are listed at appendix A.

1-3. Policy. Managers/supervisors at all levels must pursue a vigorous accident prevention program that will minimize accidental manpower and materiel losses thus providing more efficient use of resources. Decision makers at all levels will employ risk management approaches to effectively preclude unacceptable risk to the safety of personnel and property. Accidental losses affect combat readiness. Positive action will be taken to control these losses through the risk management process, training, education, and aggressive leadership. The Risk Management process is explained at appendix C. Labor management relations responsibilities regarding consultations, negotiations, union/management agreements, and applicable laws, rules, or government-wide regulations will be fulfilled and complied with.

1-4. Responsibilities.

a. The Commanding General exercises overall staff responsibility for the USAARMC and Fort Knox Accident Prevention Program. The USAARMC and Fort Knox Safety Manager acts for the Commanding General in discharging this responsibility.

b. The ABSO will:

(1) Serve as principal staff in planning, organizing, directing, and evaluating all safety program elements within the command.

(2) Provide for the establishment and implementation of plans, policies, and procedures for conducting safety programs at all levels of command. Assist commanders in determining the numbers and qualifications of personnel necessary to ensure an effective accident prevention program.

(3) Provide technical and professional assistance to eliminate or control unsafe behavior and unsafe environments.

(4) Determine the need for, obtain, and distribute safety promotional and educational materials.

(5) Provide technical assistance in accident investigation and reporting to ensure accuracy and completeness.

(6) Collect, analyze, and disseminate data concerning the accident experience of the command, prepare reports of safety activities, and conduct studies as required by higher authority.

(7) Review operating procedures, manuals, directives, and other instructions to ensure the incorporation of safe practices and safe physical standards.

(8) Review plans for proposed demonstrations and exhibits to ensure the safety of Army personnel and the public.

(9) Maintain close liaison with other staff agencies, military services, and Federal and civilian agencies in all relevant safety matters.

(10) Conduct surveys and inspections of activities to include review of accident prevention programs.

(11) Conduct Standard Army Safety and Occupational Health Inspections of work sites.

(12) Implement and manage all aspects of the Army Safety Program for this installation as outlined in AR 385-10.

(13) Implement and manage the Installation Hazard Communication, Bloodborne Pathogen, Risk Management, Ergonomics, Radiation Protection, and Respiratory Protection Programs.

(14) Develop recommendations for corrective measures where warranted by adverse accident rates or trends, hazardous conditions or procedures, or other deficiencies.

(15) Provide accident prevention material and ensure high quality training for civilian and military safety personnel at all levels.

(16) Coordinate with Preventive Medicine Service (PMS) and U.S. Army Medical Department Activity (MEDDAC), to identify and abate existing or potential occupational health hazards in the workplace.

(17) Publicize channels for reporting unsafe or unhealthful conditions.

(18) Convene the Safety and Occupational Health Advisory Council Meetings semiannually or as directed by the Commanding General.

(19) Fulfill and comply with labor management relations responsibilities regarding consultation, negotiation, union/management agreements, and applicable laws, rules, and government-wide regulation.

(20) Develop a comprehensive safety training program for additional duty safety personnel which will ensure competence in carrying out their duties. Ensure this program is taught.

(21) Provide safety support for range and training complex activities.

c. Directorate of Public Works (DPW) will:

(1) Coordinate DA Forms 4283 (Facilities Engineering Work Requests) with the ABSO for identification of safety deficiencies.

(2) Consolidate deficiencies, where correction exceeds local capability, into projects for Department of the Army funding.

(3) Establish internal procedures to assure work requests identified by ABSO as imminently dangerous are corrected without delay.

(4) Provide the ABSO a quarterly status report (Installation Occupational Safety and Health Act (OSHA) Abatement Plan) of safety deficiency abatement status.

(5) Assure coordination with the ABSO in the design, construction, and renovation of new or existing facilities to ensure compliance with OSHA standards.

(6) Support the safety program within their respective areas and provide necessary assistance to enhance the overall safety effectiveness of the Command.

(7) Provide the ABSO with DD Form 2324 (DOD Fire Incident Report).

d. G3/Directorate of Plans, Training and Mobilization (G3/DPTM) will:

(1) Notify ABSO of all accidents that occur in the training complex.

(2) Coordinate all range waivers with ABSO.

(3) Ensure that all ranges and training activities within the training complex are risk assessed.

(4) Coordinate all nonstandard training and risk assessments with ABSO.

(5) Ensure that a comprehensive range safety program is established.

(6) Monitor and provide heat stress (Wet Bulb Globe Temperature) information to personnel in the training complex.

(7) Ensure that ABSO is involved from the inception in all range renovations, modernizations, or modifications.

e. G4/Directorate of Logistics (G4/DOL) will:

(1) Provide the ABSO with Estimated Cost of Damage (ECOD) reports on all equipment and vehicles involved in accidents.

(2) Ensure that DD Form 1348-6 (DOD's Single Line Item Requisition System Document) or DA Form 3953 (Purchase Request and Commitment) for all hazardous chemicals or materials include the required information per AR 700-141.

f. Commander, Law Enforcement Command/Provost Marshal (LEC/PM) will:

(1) Support ABSO investigations to include providing necessary reports. (See Chapter 3)

(2) Assist in correcting potential traffic hazards.

(3) Provide ABSO with a daily summary of accident information collected through Military Police (MP) channels, e.g., MP blotters and traffic accident reports.

g. U.S. Army MEDDAC, Fort Knox, will:

(1) Upon request from the ABSO, support accident investigations to include evaluations of human and environmental factors which caused or contributed to the accident.

(2) Identify military patients treated for accidental injuries and occupational illnesses on Admissions and Disposition Sheets and provide the ABSO a copy daily.

(3) Coordinate with the ABSO on applicable aspects of industrial hygiene surveys and provide copies of all samples concerning respiratory protection.

(4) Be responsible for local Hazard Information Module.

h. Civilian Personnel Advisory Center (CPAC) will:

(1) Establish administrative penalties for civilian abuses of any of the required programs contained within this regulation.

(2) Coordinate with ABSO on all aspects of the Federal Employees Compensation Act (FECA) program in order to reduce unwarranted and lengthy lost workday claims.

(3) Consult with ABSO during the negotiation of all safety aspects of employee organization contracts.

(4) Ensure union notification of any change in policy, practice, or working conditions provided by ABSO.

(5) Provide the ABSO quarterly information regarding lost time FECA claims and Continuation of Pay (COP) costs.

i. Directorate of Contracting (DOC) will:

(1) Require safety plans and risk assessment with commercial contracts as required by ABSO for review and approval.

(2) Ensure contractors are advised during preperformance conferences that all accidents involving contractor employees must be reported promptly to the contracting officer.

(3) Assist in the enforcement of contract safety requirements through close coordination with the ABSO, DPW inspectors, Contracting Officer's Representative (COR), and contract administrators.

(4) Include in each contract or purchase order, which identifies that hazardous material is involved, a requirement for the supplier to include with each shipment a copy of the applicable Material Safety Data Sheet (MSDS) with a copy furnished to the ABSO.

(5) Coordinate any additional procedures with ABSO that are necessary to ensure using activities have access to the MSDS.

j. Directorate of Resource Management (DRM) will provide the ABSO a copy of the Civilian Personnel Strength report each month.

k. Commanders and directors will:

(1) Act as Safety Officers for their unit, directorate, or activity. Safety Officers will be appointed on orders.

(2) Appoint additional duty Safety personnel to accomplish assigned duties and responsibilities. Individual must have at least 1 year retainability. In troop units, the safety officer will be a commissioned officer at battalion/squadron or higher unit level, or a Staff Sergeant or higher at company/troop level.

(3) Publicize all channels available for reporting unsafe and unhealthful working conditions, emphasizing personnel responsible for making such reports.

(4) Assure employee job descriptions accurately identify hazards to which the employee may be exposed, the requirement for wearing specific items of personal Protective Clothing and Equipment (PCE), and other unique safety requirements.

(5) Establish procedures to ensure that personnel at all management and supervisory levels, who have safety-related tasks associated with their jobs, are identified and that their duty assignments and job descriptions clearly reflect these responsibilities.

(6) Include safe practices and physical standards in all directives, standing operating procedures (SOPs), and training doctrine. Assure a comprehensive SOP is prepared and readily available for each hazardous operation, e.g., range operations, vehicle operations, welding, tire changing, use of simulators, Field Training Exercise (FTX) operations, battery charging and storage, bivouac areas, fuel storage or refueling operations, storage and handling of ammunition and explosives, loading, storage and handling of chemicals, communications and electronics, spray painting, etc. The SOPs will contain detailed operating procedures, emergency procedures, training required, and required inspections, as well as other applicable information.

(7) Develop and implement an accident prevention program encompassing all operations and activities under their control. Establish specific written safety goals for their organization.

(8) Include safety objectives in all civilian supervisor's performance plans, enlisted efficiency reports, and officer evaluation reports.

(9) Arrange to receive a safety orientation from the ABSO within 14 days of assignment to a unit or directorate.

(10) Submit copies of publications implementing and supporting the safety program to the ABSO, ATTN: ATZK-S. Examples are:

(a) SOPs signed by current commander or director.

(b) Orders appointing safety officer, safety NCO and safety council.

(c) Minutes of safety council meetings.

(11) Identify and eliminate hazardous conditions, establish safe practices and procedures consistent with the mission, motivate and instruct personnel in safe performance on- and off-duty.

(12) Ensure compliance with all appropriate provisions of this document and referenced safety regulations.

(13) Require all military and civilian supervisors to actively supervise performance of subordinates to ensure compliance with safety requirements. Require rigorous enforcement of the use of required PCE.

(14) Ensure that safety officers and NCOs receive training and develop skills necessary to ensure competence.

(15) Require timely reporting of accidents as required in AR 385-40 and this document.

(16) Determine causes for each accident and take positive corrective action to preclude recurrence of a similar accident.

(17) Appoint a safety council at major subordinate units and directorate level. Safety committees should meet at least quarterly.

(18) Ensure safety briefings are presented to all personnel before holidays.

1. Supervisors will:

(1) Perform a Job Hazard Analysis (JHA) to ensure the work environment complies with applicable safety standards and regulations and that personnel under their supervision perform all operations in the safest possible manner consistent with the mission. Assure employees under their supervision observe and comply with appropriate safety and occupational health rules and regulations, including the use of PCE provided for their protection. Supervisors will set the example in using PCE.

(2) Be responsible for accident prevention to the same extent as for production, services, mission, and training.

(3) Control unsafe acts or conditions that may be conducive to accidents; procure, maintain in sanitary working condition, and require use of PCE and devices necessary to protect employees from injury.

(4) Report unsafe workplace conditions to ABSO for assistance in correction. Where DPW support will correct such deficiencies, prepare DA Form 4283 and forward through ABSO to DPW.

(5) Promptly evaluate and take action as required to correct hazards reported by employees or identified through accident investigation. Reprisal action will not be initiated or supported against employees who identify hazards, raise safety concerns, or engage in authorized safety and occupational health activities.

(6) Orient all newly assigned personnel concerning the hazards inherent in their job and work environment. Conduct regulatory training concerning specialized and general hazards in the workplace and methods for avoiding accidents.

(7) Report all accidents promptly. Conduct comprehensive factual investigations when on-duty injuries result in lost time.

(8) Ensure facts on compensation forms are fully documented and accurately reported.

(9) Provide light duty for employees injured on the job when indicated by the Medical Treatment Facility. When light duty is not available, the next higher employing echelon will attempt to find such duty.

m. Additional Duty Safety Officers and NCOs will:

(1) Complete the Additional Duty Safety Officer/NCO course within 90 days of appointment.

(2) Become familiar with Army safety regulations, safety requirements for the unit, principles of accidents prevention, and safety aspects included in sops, field manuals, technical manuals, etc.

(3) Interpret safety policies and procedures for the commander, supervisors, and subordinate safety personnel.

(4) Supervise and conduct safety inspections giving particular attention to recurring and serious hazards and to new or varied operations.

(5) Coordinate with supervisors to provide technical assistance to eliminate unsafe work practices.

(6) Provide prompt assistance with accident investigation and reporting. Review reports for completeness and accuracy and evaluate adequacy of corrective actions. Follow-up to ensure corrective actions are taken.

(7) Maintain safety records and analyze the unit's accident experience to determine accident patterns, then develop and implement countermeasures.

(8) Provide the commander or director with periodic safety progress reports and information concerning accidents.

(9) Provide assistance for commanders in conducting periodic briefings with supervisors, platoon leaders, and NCOs regarding the objectives of the safety program, methods of attaining these objectives, and the degree of success expected.

(10) Arrange for the incorporation of safety practices in operating procedures, training publications, demonstrations, and exercises to ensure the safety of Army personnel and the public.

(11) Determine the need for and obtain material for safety training, safety promotions, and safety awards.

n. Responsibilities listed above are for the overall general safety program. Responsibilities for specific areas or activities are provided in subsequent respective chapters addressing that subject.

CHAPTER 2
REPORTING AND INVESTIGATION OF ARMY ACCIDENTS

2-1. General. Accident reporting and investigating will be performed per the requirements of AR 385-40 and this document. The commander or supervisor directly responsible for the operation, material, or person(s) involved in an accident will ensure that:

a. All accidents are investigated to obtain the facts and circumstances.

b. The appropriate report is prepared on each accident per instructions in this document, DA Form 285 (U.S. Army Accident Investigation Report), DA Form 285—AB-R (U.S. Army Abbreviated Ground Accident Report (AGAR) and AR 385-40. These reports may include DA Form 285, DA Form 285-AB-R, Department of Labor Forms CA-1 (Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation), CA-2 (Federal Employee's Notice of Occupational Disease and Claim for Compensation), and CA-16 (Authorization for Examination and/or Treatment). DA Form 285 or DA Form 285-AB-R will be forwarded to the ABSO not later than 7 working days following the date of the accident. Reports will be reviewed at each level of the unit, directorate, and activity chain-of-command. Unit commanders or supervisors will indicate review by signing block 66c of DA Form 285, or block 41a of DA Form 285-AB-R. Individuals in the chain of command will review the DA Form 285 and sign in blocks 67b, 68b, and 69b or sign in block 42b of the DA Form 285-AB-R, as appropriate.

c. The following are minimum requirements for reporting military on-duty injuries:

(1) DA Form 285 will be used only for reporting Class A and B on-duty ground accidents. DA Form 285-AB-R will be used to report all off-duty accidents, and all class C and D on-duty accidents.

(2) For an occupational illness that results in lost time from work beyond the day or shift on which it occurred, the unit to which the soldier is assigned will submit a completed DA Form 285-AB-R to the ABSO.

d. Reporting of military off-duty injuries. When the injury results in at least 1 lost workday, the unit will submit a DA Form 285-AB-R.

e. For each (on-duty) fatality, a fully completed typed DA Form 285 will be sent through command channels to the ABSO. These reports will be signed by the brigade/regimental commander

in block 68b. For each (off-duty) fatality, a fully completed typed DA Form 285-AB-R will be sent through command channels to the ABSO. These will be signed by the brigade/regimental commander in block 42b.

f. The following criteria will be used in determining duty status. This criteria is for accident reporting purposes only and has no relation to compensability or line-of-duty determination.

(1) On-Duty Status. This applies to Army personnel who are:

(a) Physically present at any location where they are to perform their officially assigned work (includes those activities incident to normal work activities that occur on Army installations, e.g. lunch or coffee break).

(b) Being transported by Government, privately-owned or commercial conveyance for the purpose of performing officially assigned work (includes reimbursable travel in private motor vehicles for temporary duty, but not routine travel to and from work).

(c) Participation in compulsory sports or physical training activities.

(2) Off-Duty Status. This applies to Army personnel who are not in an on-duty status, whether on or off Army installations.

g. Civilian Injuries. In order to reduce the danger of injury in the workplace and the cost associated with these injuries, reporting procedures will be per current union/management agreements.

h. Property or Vehicle Damage Accidents. The owning unit will submit a fully completed DA Form 285-AB-R through channels to the ABSO for accidents resulting in $2,000 or more property damage.

i. Tactical Vehicles. All wheeled and tracked vehicle accidents and fires, regardless of cost, MUST be reported on a fully completed DA Form 285-AB-R.

2-2. Nonreportable Occupational Illnesses and Injuries.

a. Nonoccupational diseases. Injuries associated with nonoccupational diseases where the disease itself, not the injury, is the proximate cause of the lost time (for example, a minor cut suffered by a hemophiliac which results in time away from work.

b. Self-inflicted injuries. Suicides, suicide attempts, or voluntary self-inflicted injuries (for example, Russian roulette).

c. Criminal assault. Injuries that result from criminal activity where the intent was to inflict injury. These include cases of assault, rape, murder, offenses under Article 118 UCMJ (but not negligent homicide), voluntary manslaughter, and attempts to commit any of these offenses.

d. Prior-Service injuries. Injuries sustained before entry into service or employment unless they are specifically aggravated by current tenure of service.

e. Strains. Strains when they result from pre-existing musculoskeletal disorders or minimal stress or strain (for example, simple, natural, nonviolent body positions or actions, such as coughing or sneezing).

f. Hospitalization. Hospitalization of a person solely for observation/administration purposes and subsequent release.

g. Adverse reaction. Adverse bodily reactions resulting directly from the use of alcohol or other drugs not administered by or under the direction of a competent medical authority are not reportable.

2-3. Mileage Report. G4/DOL Transportation Motor Pool (TMP) will provide to the ABSO, not later than the 5th working day of the month, the number of miles driven by GSA vehicles.

CHAPTER 3
CENTRALIZED ACCIDENT INVESTIGATION, GROUND (CAIG) ACCIDENTS

3-1. General. a. Class A on-duty accidents, class B on-duty training accidents and special case accidents as determined by the Director, Command Safety Office, U.S. Army Training and Doctrine Command (TRADOC) will be investigated by a CAIG investigation board.

b. A Class A accident is an Army accident in which the total cost of property damage is $1,000,000 or greater; or an injury or occupational illness that results in a fatality or permanent total disability.

c. A Class B accident is an Army accident in which the total cost of property damage is $200,000 or greater, but less than $1,000,000; or an injury or occupational illness that results in permanent partial disability or hospitalization of five or more personnel in a single occurrence.

3-2. Accident Investigation Boards.

a. The installation commander will appoint the CAIG board except when an accident is investigated by the U.S. Army Safety Center (USASC). The accident investigation board will consist of three members. Additional persons may be appointed as needed for technical expertise. Members of the board will be selected from organizations other than the unit where the accident occurred. The president of the board will be a field grade officer or civilian equivalent. Board members will be relieved of all duties until the investigation is completed.

b. All CAIG investigation boards will employ general use accident investigation procedures according to AR 385-40 unless directed to do a limited use accident investigation by TRADOC. Investigation reports will include accident causes, contributing factors, actions recommended, and corrective actions taken. An Equipment Improvement Report (EIR) or Quality Deficiency Report (QDR) is required when material failure is a cause or contributing factor. Reports will be submitted to the ABSO NLT 20 days from the date of the accident. A format for appointment orders of CAIG boards is at Figures 3-1. The board's written report will be kept confidential.

3-3. Responsibilities.

a. Commanders will initiate the following actions upon learning of a Class A or Class B accident:

(1) Immediately notify MP Central Emergency Communications Center, after which the ABSO will be notified during regular duty hours and the USAARMC Staff Duty Officer (SDO) after regular duty hours. As a minimum, notification should include the information below; however, notification will not be delayed because certain elements are unknown.

(a) Date and time of accident.

(b) Name, social security number, and unit.

(c) Extent of injuries or damage.

(d) Type and location of accident and disposition of injured persons and damaged property.

(e) Hazardous or sensitive materials involved.

(f) Weather conditions at time of the accident.

(g) Brief synopsis of the event. Include alcohol/drug use, if applicable. For motor vehicle accidents, indicate if individual was wearing seat belts and had received accident avoidance training.

(2) Appoint a point of contact (POC) for the investigation and advise the ABSO of the name and phone number of the POC.

(3) Ensure the accident site is secured immediately in coordination with MP/Criminal Investigation Detachment (CID) personnel, and remains secured until released by MP and ABSO personnel.

(4) Obtain copies of military personnel, medical, and training records for all personnel directly involved in the accident. Civilian records will be obtained only after coordination with AFGE Local 2302.

(5) Provide witness information (names, ranks, telephone numbers, summaries of any statements made) to the accident board.

(6) Obtain oil and fuel samples, as requested, from vehicles involved in the accident.

(7) Provide the accident board with a list military personnel from whom blood and urine samples were taken.

(8) Coordinate all actions with appropriate authorities for accidents occurring in areas not under Army control.

(9) Secure operational, maintenance, and historical records of equipment involved.

b. The USAARMC SDO will immediately notify the on-call ABSO representative when notified of an accident after regular duty hours.

c. The MPs will:

(1) Dispatch Emergency Services.

(2) Provide accident site security.

(3) Ensure the accident site is not disturbed until photographs are taken and the accident investigation team arrives and releases the site.

d. The MEDDAC will:

(1) Provide evacuation and treatment of injured personnel.

(2) Provide medical records of personnel involved per provisions of AR 40-66.

(3) As requested, provide results of blood and urine samples obtained in those cases where a commander directs specimens to be obtained in order to determine whether a soldier is under the influence of drugs or alcohol or where those specimens are routinely obtained per an autopsy protocol.

e. The DPW will minimize environmental damage. Cleanup of oil, fuel, and other hazardous material spills will be accomplished after coordination with ABSO.

f. ABSO will:

(1) Notify the following as required of a Class A or B accident:

(a) USASC.

(b) TRADOC.

(c) FORSCOM.

(d) OSHA

(e) Other concerned agencies.

(2) Serve as safety POC for the board.

(3) Ensure preliminary actions required by these instructions are initiated.

(4) Provide information concerning the accident and progress of the investigation to TRADOC, Command Safety Office.

(5) Coordinate the activities and reports prepared and submitted by all agencies concerned with the accident, and send reports to TRADOC Command Safety Office.

(6) Provide office space for the board.

(7) Provide the board with a 1:50,000 map that includes the accident site.

(8) Obtain directives that pertain to the operation being conducted which resulted in the accident.

(9) Obtain weather statements for the accident board.

(10) Coordinate billeting of USASC team members.

(11) Telephonically notify G3/DPTM of requirements and qualifications for local board members.

(12) Obtain any special clearances necessary for access to the accident scene by board members.

(13) Arrange for special transportation, if required, to reach the accident scene (i.e., aircraft).

g. G3/DPTM will:

(1) Appoint, without delay, local investigation board members (to include administrative support) with requirements/qualifications as specified by the Director, ABSO. Local members will not be assigned to the board from the activity which experienced the accident.

(2) Notify selected local members of their appointment.

(3) Publish orders for members of the investigation board, to include USASC members.

(4) Provide a photographer, as required, to assist the board in photographing the accident scene.

(5) Ensure that photo lab support to develop, print, and mount color photographs and slides is provided as required by the investigation board.

(6) Assist ABSO to arrange for accident board special transportation requirements (i.e., aircraft).

h. G4/DOL will:

(1) Test oil and fuel samples as requested by the investigation board.

(2) Provide transportation for USASC board members for the duration of the investigation.

(3) Provide, as required, a suitable and secure area for storage and perform technical inspection of wreckage.

i. The Adjutant General (AG) will ensure that personnel records of all military personnel involved in the accident are readily available for review by the accident board. Provide copies, upon request, of specific portions of the records.

j. Commanders and directors of personnel appointed to serve as board members will ensure that priority is given to accident investigation duties to ensure prompt completion of Centralized Accident Investigation (CAI)/CAIG boards.

3-4. Findings and Recommendations. Responsible commanders will be briefed on tentative findings and recommendations at the conclusion of the investigation.

3-5. Collateral Investigations Under Provisions of AR 15-6.

a. USASC or local investigation does not relieve commanders of the requirements to conduct a collateral board investigation per AR 15-6 and AR 385-40. However, the collateral board will not interview witnesses or disturb the accident site until authorized to do so by the USASC Accident Investigation Board President or local Investigation Board President.

b. The CAIG Program is not intended to interfere with, impede, or delay law enforcement agencies in the execution of regulatory responsibilities as they apply to the investigation of accidents for a determination of criminal intent or criminal acts. Neither investigation should hamper the other since accomplishment of both investigations is in the best interest of the Army. Per AR 195-2, Criminal Investigation Activities, law enforcement

agencies have priority to witness and accident site access. The prudent exercise of this priority will permit accomplishment of the CAIG mission without conflict with law enforcement requirements.

3-6. Privileged Information. Accident reports and associated documents are privileged information and cannot be used as evidence or to obtain evidence in any disciplinary action.

3-7. Investigation Procedures. An investigation is a systematic examination to disclose all relevant facts. The accident investigation board has two functions.

a. To determine all established, probable, or suspected factors which caused or contributed to the accident.

b. To evaluate and analyze the acquired information and develop recommendations for actions that will prevent recurrence of similar accidents.

3-8. Board Procedures. The president will take action to ensure that a thorough investigation is conducted. They should avoid the tendency to investigate the most readily apparent cause. An inclination to first determine the cause and then investigate to prove the initial conclusion must be avoided. The findings of the board must be based upon a complete and impartial evaluation of all available facts.

a. Basic Phases. The basic criteria for the detailed procedures of investigation may vary with the type of accident. The investigation must be well-organized to ensure continuity of effort from the preliminary examination to the submission of the final report. This is most readily accomplished by dividing the investigation into phases.

b. Orientation and Examination Phase. This phase provides the opportunity for a thorough examination of all aspects of the accident.

c. Data Collection Phase. The collection of data is the consolidation of all information acquired and substantiated to include notes, statements, charts, diagrams, and photographs. As information is collected, it should be assembled and consolidated to provide data for analysis.

d. Analysis of Data Phase. If consolidation of data is not accomplished, accurate analysis is difficult or impossible. In addition to assisting in the analysis, consolidation of data will reduce the possibility of error, omission, or lack of attention to

a particular area of interest. Only when these deficiencies are known can action be taken to obtain the necessary information before it is lost in salvage of the wreckage, destruction of the accident scene, or unavailable witnesses. A careful and complete analysis of data compiled is required to establish the cause of an accident. If this analysis does not clearly establish the cause, all available information will be used to establish probable causes and possible contributing factors.

e. Conclusions Phase. The results of the analysis phase is reflected in the conclusions of the board. Each conclusion must be based on facts that were established during the investigation.

f. Recommendations. The investigation board's recommendations must be the result of mature deliberation based upon factual causes and findings.

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(Office Symbol) (Date)

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Duty Appointment

1. Effective (date) , the following personnel are appointed as members of the Accident Investigation Board (Ground):

President - (Name, Rank/Grade, SSN, and Organization)

Recorder - (Name, Rank/Grade, SSN, and Organization)

Technical Advisors - (if applicable) (Names, Ranks/Grades,
SSNs, and Organizations)

2. Authority: AR 385-40.

3. Purpose: Investigate Army accident: (Date, Unit, Equipment/Activity).

4. Period: From (Date) until investigation complete.

5. Procedures: Board will be conducted following the procedures for a general use or limited use accident investigation if so directed by HQ TRADOC.

FOR THE COMMANDER:

(signature)
(signature block)

Figure 3-1

CHAPTER 4
PREVENTION OF VEHICLE ACCIDENTS

4-1. Driver Training. All Army Motor Vehicle (AMV) drivers will be trained and tested per AR 385-55 and AR 600-55. Accident avoidance training and the Army Motorcycle Safety Course are designed to reduce motor vehicle accidents by training and motivating personnel to drive defensively.

a. Accident Avoidance Class.

(1) All personnel, military and civilian, 26 years of age or younger, who are required to drive an Army motor vehicle will successfully complete an Army or DOD recognized or approved accident avoidance class.

(2) Attendance at accident avoidance class, regardless of age, and refresher training every 4 years, is required for all drivers of Army-owned or leased buses, military police vehicles, ambulances, fire trucks, fueling vehicles, vehicles carrying hazardous cargo, crash-rescue vehicles, or other emergency vehicles.

(3) Attendance at accident avoidance class is not a pre-requisite for driving a tracked vehicle nor is it a prerequisite for obtaining a learner's permit to operate a tracked vehicle.

(4) Completion cards will be issued and are valid for 4 years from date of issue.

(5) Optional Form 346 (U.S. Government Motor Vehicle Operators' Identification Card) will not be issued to personnel until they have completed the accident avoidance class.

(6) To register for class, contact the LEC/PM Office.

b. Army Motorcycle Safety Course.

(1) All military personnel desiring to operate a motorcycle or moped on Fort Knox must attend the Army-approved Motorcycle Safety Course. This includes military personnel and their family members. NOTE: Family member is defined as husband, wife, and any children residing with the sponsor.

(2) Operators of motorcycles and mopeds registered to operate on Fort Knox must be currently licensed by civil authorities to operate motorcycles or mopeds on public highways.

(3) To register for the class, contact the LEC/PM office.

(4) Students must use their own motorcycle or moped for the examination phase. Students will be required to show registration and license before class work begins.

(5) Personnel who operate motorcycles or mopeds on Fort Knox roadways will comply with the following:

(a) Operators will have in their possession:

1. A valid motorcycle license or a valid driver's license to operate a moped.

2. An Army Motorcycle Safety Course card as evidence of satisfactory completion of an Army-approved motorcycle safety course.

3. Vehicle registration. Mopeds are not required to have state registration.

(b) All motorcycle or moped operators will wear:

1. An approved helmet fastened securely.

2. Approved eye protection (clear goggles or face shield).

3. Full-fingered gloves.

4. Long trousers and long sleeve shirt or jacket.

5. High-visibility reflective vest.

6. Leather boots or over-the ankle shoes.

(c) Motorcycles/mopeds will have two rearview mirrors.

(d) Use of headphones or earphones is prohibited.

(e) Motorcycles/mopeds will have headlights turned on at all times.

(6) Civilian employees will comply with the Fort Knox negotiated motorcycle policy.

4-2. DA Form 348 (Equipment Operator's Qualification Record), Documentation. The following information will be included as a minimum on DA Form 348.

a. Accident avoidance training and date.

b. Safety awards.

c. Army motor vehicle accidents.

d. Civilian and military traffic points and citations.

e. Operator's training completed.

4-3. Seat Belts. a. Seat belts will be inspected by the operator before use to ensure they are functional. Damaged or nonfunctioning seat belts will be repaired before the vehicle is driven.

b. All personnel operating or riding as passengers in AMVs or Army combat vehicles (ACV) will wear installed seat belts.

c. Load bearing equipment (LBE) will be removed before fastening seat belts.

4-4. Ground Guides. a. Ground guides will be proficient in the use of hand and arm signals. Ground guides will walk 2 meters outside the path of the vehicle when space permits and a minimum of 10 meters in the front or rear of the vehicle they are guiding.

b. Continuous visual contact will be maintained between the vehicle commander or the driver and the dismounted guide.

c. Ground guides will be utilized in the cantonment area when the posted speed limit is 15 miles per hour (mph) or less, when all tracked and wheeled vehicles are 2½ tons or larger, or where visibility is limited.

d. Two ground guides will be used while backing the vehicle, and while maneuvering in close quarters.

e. Ground guides will be utilized in the following situations or as the commander dictates:

(1) On bypasses around unserviceable bridges.

(2) Around road blocks.

(3) On shoulders of narrow roads.

(4) In or near bivouac areas.

(5) When crossing roads.

f. During periods of reduced visibility, ground guides will wear high visibility clothing and use flashlights.

4-5. Safe Transportation of Personnel.

a. Driver Qualification. Vehicles will not be used to transport personnel during driver training.

NOTE: Only qualified drivers, experienced on the vehicle to be utilized, will be used to transport personnel. Before transporting personnel, drivers will receive a briefing on the route and hazards they may expect to encounter.

b. Types of Transportation. Personnel will be transported in passenger type vehicles, such as sedans, or buses, to the maximum extent possible. When these type vehicles are not available, cargo vehicles may be used. Personnel may be transported without fixed seating for short distances (under 10 miles) on post provided each passenger remains seated wholly within the body of the vehicle and the body of the vehicle is equipped with stakes and sideboards. Flatbed trucks will not be used to transport personnel.

c. Personnel may be transported in the cargo bed of general purpose pickup trucks provided the following safety procedures are followed.

(1) Vehicle tailgate must be secured.

(2) Passengers must be seated on the cargo deck with no portion of their body overhanging the vehicle sides or rear.

(3) Vehicle will not be operated off post.

d. Personnel will not be transported in engineer dump trucks unless the vehicles are equipped with fixed seating for all passengers, an approved positive anti-dumping device is installed, and a means to ease boarding and off loading is provided.

e. Driver Responsibilities. Drivers of cargo trucks, pickup trucks, and dump trucks carrying passengers will follow the rules outlined below.

(1) Walk to the rear of the vehicle before starting to ensure the tailgate and safety strap are secured, and that all passengers are seated.

(2) Walk to the rear of the vehicle after stopping, release the safety strap, and lower the tailgate before

permitting passengers to dismount. Passengers will not jump from vehicles.

(3) Drivers will not move a vehicle in which any personnel are in an unsafe position, such as standing, or sitting on the tailgate or the sides of truck.

(4) Before backing a vehicle, the driver will check for clearance and sound the horn. When visibility is blocked or limited, drivers will use ground guides. If ground guides are not available, the driver will walk around the vehicle to check clearance before backing.

(5) Vehicles transporting passengers will not tow other vehicles or equipment.

(6) Drivers will ensure there is adequate ventilation to prevent accumulation of exhaust gases in the cargo compartment or cab of the vehicle.

f. Personnel will not ride on top of cargo being transported or in vehicles transporting unsecured cargo such as hazardous cargo, fire wood, field heaters, or hot food items. If personnel ride in vehicles hauling cargo, the cargo must be secured to prevent it from shifting or overturning and injuring passengers.

g. Vehicle Capacities. The passenger carrying capacities listed below are for normal passenger carrying operations and are consistent with safety policies and design features of the vehicles. The passenger capacities apply only when the vehicle is properly equipped with fixed seats. The maximum number of passengers authorized and the maximum speed limit will be stenciled on the dashboard of tactical vehicles.

Vehicle	Passenger Capacity
2 1/2-Ton Cargo Truck	14
2 1/2-Ton Extended Cargo Body Truck	18
2 1/2-Ton Dump Truck	10
5-Ton Cargo Truck	16
5-Ton Extended Cargo Body Truck	20
5-Ton Dump Truck	12
5/4-Ton HMMWV Troop Carrier	8
5/4-Ton HMMWV Cargo/Troop Carrier	4
5/4-Ton M880, M881, M882	8

NOTE: The passenger capacity does not include the operating crew. Refer to the operator's manual for vehicles not listed above.

4-6. Tire Chains. Tire chains will be used at the commanders discretion. Tire chains will not be used when driving on dry pavement. Guidance concerning tire chains on fuel tankers is in FM 10-71.

4-7. Military Motor Vehicle Operation. This section applies to both wheeled and tracked vehicles.

a. Before operation, vehicles will be properly dispatched and preventive maintenance checks and services (PMCS) conducted.

b. Smoking is prohibited in and around all military vehicles.

c. Vehicles will not be started or allowed to run without a driver seated at the driver's station.

d. Drivers will be trained, qualified, and licensed on the vehicle they are operating. In addition drivers transporting hazardous materials must receive training required by AR 600-55.

e. The senior occupant of the vehicle is responsible for safe operation of the vehicle.

f. Drivers will ensure that windshields and vision blocks are clean and free of obstructions. All drivers, gunners, air guards, and track commanders will wear goggles when windshields are down or when riding in open hatches.

g. Drivers of vehicles with radios will be cautioned concerning dangers of operating near high tension wires. Antennas will be tied down (no lower than 3 meters) when the vehicle is in motion. Antenna caps will be firmly in place. Tape will be used if necessary to secure the cap in place.

h. Parking brakes will be engaged when vehicles are parked. When tactical vehicles and buses are parked on an incline, both the parking brake and chock blocks will be used. Chock blocks will be provided and carried on all tactical vehicles and buses.

i. Personnel will not sleep in vehicles with the engine running.

j. Ground guides will not position themselves between two vehicles or between a vehicle and a fixed object.

k. Vehicles will not be loaded above their capacity, and all loads will be secured.

l. Special care will be taken by drivers hauling tanks of liquid which are only partially full to ensure liquids do not shift in turns and overturn trailers or vehicles.

m. Personnel will be instructed in the proper procedures for coupling and uncoupling trailers.

n. The use of safety chains between trailers and prime movers is mandatory.

o. When crossing hazardous terrain or obstacles where danger of overturning is possible, passengers will dismount.

p. When crossing on post roads where the oncoming traffic has the right-of-way, road guards must be used. Road guards must wear high visibility devices when controlling traffic. In addition, red baton flashlights or flares must be used during periods of darkness or when visibility is otherwise reduced to 500 feet or less. Road guards will be posted 500 feet on either side of the crossing site to halt and warn motorists of the crossing.

NOTE: Road guards cannot stop traffic off post. Off-post crossings must be coordinated through LEC/PM.

q. Vehicles will maintain adequate intervals to ensure safe stopping under all conditions. Dust, fog, and other conditions which restrict visibility require greater intervals. All vehicles must operate at a speed safe for road conditions.

r. Towing of any vehicle will be accomplished in accordance with the vehicles' technical manual and FM 9-43-2.

s. Any vehicle above the size of a sedan designed to transport personnel will come to a complete stop at unguarded railroad crossings and check in both directions before crossing when transporting personnel. All personnel will exit a vehicle stalled on railroad tracks. In case of damage to railroad tracks at Fort Knox, the G4/DOL, Transportation Officer will be notified immediately.

t. Movement of military vehicles under blackout conditions is prohibited on roads open to the public unless prior arrangements have been made to close the road to public traffic. Coordination with G3/DPTM, Range Division is required for all blackout driving conducted in the training complex.

u. Police Call. Vehicles used to accompany troops on roadway police call will be identified with the slow moving vehicle triangle as well as with four-way flasher lights. Vehicles

will not stop in the lane of traffic and personnel will not lean out of a moving vehicle to retrieve trash. Personnel conducting police call along roadways will wear a reflective vest. Roadway police call will not be conducted during peak traffic times nor during periods of reduced visibility such as fog, snow, or darkness. Police call will be planned to minimize the number of times soldiers must cross traffic lanes.

v. Transport of Sensitive Cargo. When not in a convoy, all military vehicles transporting sensitive cargo (e.g., weapons, ammunition, high dollar items) will have a senior occupant of the rank of SGT (E5) or higher. Commanders are authorized to grant exceptions to this requirement on a case by case basis. G4/DOL TMP vehicles driven by TMP drivers are exempt from this requirement.

4-8. Tracked Vehicle Safety.

a. Tracked Vehicle Operations. Operation of tracked vehicles will be per this and other applicable Fort Knox regulations, as well as appropriate technical and field manuals.

b. Commanders will adhere to the guidelines in AR 600-55 and FM 21-306 for the selection and training of tracked vehicle drivers.

c. General Safety Precautions.

(1) Each tracked vehicle will have a driver and a track commander (TC) who will ride in the commander's hatch. The TC must be a licensed driver who is experienced and competent in track vehicle operations.

(2) "POWER" will be announced and acknowledged by all crewmembers before a vehicle is started and before operating the main gun turret.

(3) Tracked vehicles will not be started unless the portable and fixed fire extinguishers are present and operational.

(4) Open hatch covers will be tested by shaking them vigorously to ensure the latches are locked in position. Open hatch covers will be securely fastened with the safety pin to preclude accidental closing during movement of the track.

(5) Protective headgear, such as the Combat Vehicle Crewman (CVC) or the kevlar helmet will be worn with the chin strap buckled by personnel in tracked vehicles.

(6) All personnel who operate tracked vehicles under blackout drive conditions will receive drivers training for night operations. At a minimum, training will include the following: Night Vision Goggle (NVG) use, fundamentals of night vision, ground guide procedures, sensory illusions at night, effects of stress and fatigue, night driving road test, and speed limits.

(7) All items, both inside and outside the turret, will be secured before movement.

(8) Aerosol cans, solvent, fuel, and other flammable items will not be transported inside a tracked vehicle. Flammable or combustible items will not be stored near personnel heaters. Tank turrets and the interior of other tracked vehicles will be kept free of needless clutter that could intensify a fire or hinder evacuation.

(9) Vehicles will not ford or swim unless water depth is known. Refer to appropriate vehicle TM for fording and swimming precautions.

(10) Tracked vehicle emergency evacuation drills will be conducted quarterly to ensure crew proficiency. This requirement applies to instructors and mechanics, as well as tank crews, since they are also subject to emergency evacuations.

(11) Riding on the outside of vehicles is prohibited. Request for exception to this requirement, along with a risk assessment, must be submitted to the ABSO for review and approval. Personnel riding in hatches will be at name tag defilade, e.g., only head and shoulders exposed.

(12) Tracked vehicles crossing bridges will comply with the following restrictions.

(a) Tracks in Tow: One-way crossing only; center tanks on bridge; no stopping, starting, or turning; uniform speed not to exceed 5 mph; and only one towing tank at a time on bridge.

(b) Tracks (self-propelled): One-way crossing only; center tank on bridge; no stopping, starting, or turning; uniform speed not to exceed 8 mph; and minimum spacing of 100 feet.

(c) Tracked vehicles traveling in any configuration, i.e. self-propelled, towed, or hauled, will not exceed bridge weight limits.

(13) Crewmembers will warn each other of impending hazards, i.e., rollovers, turret rotation, or rough terrain.

(14) Personnel riding in tracks will drop down inside the vehicle and brace themselves in the event rollover is imminent.

4-9. Privately-Owned Vehicle (POV) Operation. POV accidents constitute the Army's most repetitive cause of fatalities and serious injuries. While commanders or supervisors do not control POV operators similar to those operating Army motor vehicles, there are numerous areas of influence which may be used to reduce manpower losses. The following requirements apply to unit POV safety programs:

a. The Army Driver Improvement Program (ADIP). A program designed to reduce POV accidental deaths and injuries by making soldiers aware of the personal and professional consequences of engaging in unsafe driving behaviors. ADIP consists of 12 modules which can be hand receipted from the ABSO.

b. The semi-annual POV Inspection Program. This program will be established in all military organizations and conducted each year before the summer and winter seasons. This inspection will be conducted by experienced mechanics using FK Form 4650-E (POV Inspection Checklist), appendix D.

c. Safety Briefings. Commanders will conduct quarterly POV safety briefings that emphasize seasonal driving hazards. Briefings will also emphasize the use of restraint systems, driving while fatigued, use of alcohol, and speeding. Commanders will also conduct safety briefings prior to holidays and extended leaves.

d. Safety Restraint Usage. (1) Soldiers will use a restraint system while driving or riding in a POV that is equipped with a restraint system required by Department of Transportation (DOT) or other equivalent transportation authority. The restraint system will be worn at all times, both on and off federal installations.

(2) All civilian personnel, including visitors, will use a restraint system while driving or riding in a privately-owned or Government-owned vehicle with manufacturer-installed restraint systems. The restraint systems will be used on federal installations at all times and off federal installations when the vehicle is used for official business.

(3) Individuals will not ride in seats from which manufacturer-installed occupant restraints have been removed or rendered inoperative.

4-10. Bicycle Operation. Personnel who operate bicycles on Fort Knox roadways will:

a. Obey all traffic laws and traffic control devices.

b. Equip bicycles with a horn or other sound device which will be capable of being heard by approaching pedestrians or vehicles.

c. Not wear headphones or earphones while riding a bicycle.

d. Will comply with the following during the hours of darkness:

(1) Bicycles will be equipped with one light in front which will clearly reveal objects at least 50 feet ahead.

(2) Bicycles will be equipped with one red light or red reflector in the rear.

(3) Bicyclists will wear a high-visibility vest or other reflective gear.

e. Will wear approved bicycle helmets.

f. Not ride in the training complex or on range roads without approval of G3/DPTM, Range Division.

4-11. Off-road Vehicles (ORV). a. Individuals who desire to operate ORVs in off-road areas, on Fort Knox, must contact Directorate of Public Works, Land Management Branch, Bldg. No. 112. ORVs include motorcycles, dirt bikes, four-wheel drive trucks, and all-terrain vehicles (ATV).

b. All personnel operating or riding in or on an ORV in off-road areas on the Fort Knox reservation will wear a helmet (which meets the American National Standards) and approved eye protection or face shield. The operator of an ORV will not carry more persons than that for which the vehicle was designed.

CHAPTER 5
PERSONNEL MOVEMENT ON ROADWAYS

5-1. Marching. When marching along a roadway within the cantonment area, troops will march to the right side, as far off the road as possible. In all cases, troop movements will minimize interference with vehicular traffic. Supervisors of troops will be positioned to effectively control the movement of the troops and at the same time offer no impediment to traffic. Road guards will be dispatched to all intersections in sufficient time to allow vehicular traffic to halt without endangering the lives of troops or creating traffic hazards. All foot columns will comply with traffic signals. Road guards will use extreme caution by looking to the right, left, and front before entering an intersection. After traffic has been halted, all units will double time when crossing major roads or intersections, except in hot weather (Wet Bulb Globe Temperature/Wet Globe Temperature Condition - BLACK), when NO double timing will be ordered.

5-2. Unit Formation Running. Policies governing safety of unit formation running have been established by G3/DPTM. These policies include established restricted areas and prescribed physical training uniform.

a. Policy.

(1) Each brigade has an established unit running route all other major activities and tenant organizations will conduct unit runs on the brigade running route nearest that organization's training site).

(2) Unit formation runs will be completed before 0800 or commence after 1600 on duty days.

(3) A vehicle speed limit of 10 mph will be observed while approaching and passing running troops.

(4) Units will run only three abreast for safety purposes (large length units will be broken into small groups).

b. Safety Equipment.

(1) Advanced front road guards will be placed 15 meters and front road guards will be placed 10 meters in front of formation and 30 meters to the rear of the formation. All road guards will be provided with reflective vests and baton flashlights.

(2) Personnel running left of formation (i.e., cadence callers, unit leaders, platoon sergeant, executive officer, commander, etc.) will wear a road guard vest.

(3) Every fifth person running on the left and right side of formation will wear a road guard vest.

(4) Stragglers will be provided road guard vests or followed by vehicles with emergency flashers turned on.

(5) Road guards will also wear safety vests during daylight hours.

5-3. Recreational Walking and Jogging. All persons using installation roadways for recreational walking and jogging during hours of darkness (30 minutes after sunset to 30 minutes before sunrise) will display a minimum of 20 square inches (at least 8 square inches front and rear) of reflective material (i.e., high visibility vest, arm bands, or leg bands). Additionally, walkers or joggers will comply with the following at all times.

a. When jogging with others on the roadway, run in single file.

b. Utilize sidewalks where available and practical.

c. Always walk and jog facing traffic.

d. Use extreme caution when crossing streets and at intersections. Obey all traffic signs and signals.

e. Individual walkers and runners or informal groups of walkers or runners must yield the right of way to all vehicular traffic. Walkers or runners have right of way over vehicles only at marked crosswalks.

f. Use of headphones is prohibited while walking/jogging on post streets.

g. Personnel will not walk, run, or jog on range roads or in the training complex without approval from G3/DPTM, Range Division.

CHAPTER 6
FIELD TRAINING EXERCISE (FTX) SAFETY

6-1. General. Accidents and injuries tend to increase during FTXs if safety is not an integral part of the exercise. Lack of safety planning and failure to adequately prepare all individuals involved are primary causative factors. Inappropriate procedures, ignorance of proper procedures, and disregarding procedures characterize many accidents during FTXs. Although this chapter is entitled FTX Safety, the requirements apply during all operations.

6-2. Safety Management and Organization.

a. The exercise commander will appoint an assistant safety officer to serve as the overall exercise safety director; and a sufficient number of assistant unit safety officers will be appointed to ensure adequate hazard control and safety guidance at all levels.

b. A safety "stand-down" will be held before deployment to ensure all participants are properly indoctrinated.

c. All participating personnel will be briefed on exercise hazards and countermeasures, both before and subsequent to arrival at the training site.

d. Vehicles and equipment will be thoroughly inspected and safety deficiencies corrected before deployment. Vehicle and equipment operators will be trained and licensed before the exercise. At no time will untrained, unlicensed personnel operate vehicles or equipment.

e. Commanders will establish sleep plans before the exercise. Sleep plans will take into account tactical situations and risk factors involved in determining sleeping locations.

f. Risk management procedures will be formally included in all phases of the exercise. The purpose is to identify potential safety risks and prescribe precautions to reduce or eliminate hazards which might cause an accident.

6-3. Vehicle Movement. The requirements of chapter 4 and Fort Knox Reg 385-22 apply during all field training.

6-4. Bivouac Areas. The following will apply in all bivouac areas:

a. Personnel will not erect tents or sleep in the open near roads, trails, or other areas where vehicles might travel.

b. Fuel lines for tent heaters will be protected from damage when inside tents and when run across other walkways. Tent vent flaps will be open when the heater is in use to prevent build-up of carbon monoxide. Fuels will not be mixed; e.g., diesel will not be mixed with MOGAS. Approved fuel containers will be marked with the type of fuel they contain.

c. Areas surrounding the stoves will be void of combustibles at any point closer than 4 feet on a horizontal plane from the floor to the ceiling of the tent or building.

d. Use only military standard heaters. Use of locally procured commercial space heaters in lieu of military heaters is not authorized.

e. Equipment such as M2 burners and Herman Nelson heaters, will be operated IAW the appropriate technical manual (TM).

f. A bivouac fire patrol will be established to ensure all necessary precautions are taken to prevent accidental fire or explosion.

g. Adequate ventilation will be provided for all types of fuel-powered equipment to prevent accumulation of carbon monoxide.

h. Flammable materials will be stored and used properly. Gasoline will not be stored inside buildings or tents, nor will it be used as a cleaning agent or solvent.

i. Generators, refueling vehicles, and electrical equipment will be properly bonded and grounded.

j. Operation of kitchen equipment, M2 burners, generator equipment, lanterns, and related equipment will be restricted to trained personnel. Licensing will be at the discretion of unit commanders. The area around the equipment will be cleared of flammable and combustible materials to prevent ignition.

k. Firearms and ammunition will be strictly controlled.

l. Vehicles and trailers will be parked in such a way as to prevent their rolling into the bivouac area.

m. Vertical antennas will be located a distance of at least twice the antenna's height from power lines to preclude contact during assembly or disassembly.

n. Open fires are not allowed in the training complex.

CHAPTER 7
CONVOY OPERATIONS

7-1. General. The planning and coordination involved in convoy operations require aggressive staff action.

7-2. Responsibilities.

a. Unit commander will:

(1) Ensure a risk assessment is conducted to identify hazards along the march route; recon is encouraged. Common risk factors outlined in FM 55-30, Chapter 5, and USAARMC Reg 385-22 will be considered.

(2) Ensure the safety of personnel and equipment during convoys.

(3) Designate a convoy commander.

b. Convoy commander will:

(1) Be the senior ranking officer with the convoy.

(2) Ensure each vehicle has an assistant operator or senior occupant.

(3) Ensure proper towing equipment and procedures are adhered to.

(4) Ensure all personnel are in correct uniform and have appropriate equipment for the environment.

(5) Before departure, brief all drivers, assistant drivers, and senior occupants on the following:

(a) Hazardous areas and conditions.

(b) Safe following distance.

(c) Convoy and catch-up speed.

(d) Route, to include strip map.

(e) Rest periods.

(f) Signals.

(g) Precautions taken at the halt.

(h) Actions taken for disabled vehicles.

(i) Traffic control.

(6) Ensure vehicles used to transport fuel and ammunition are placarded and loaded to the regulatory specifications, equipped with the appropriate fire fighting equipment, and located at the rear of the convoy.

(7) Ensure drivers operating vehicles used to transport hazardous materials receive training required by AR 600-55.

(8) Ensure ammunition and fuel are transported separately.

(9) Prohibit smoking within 50 feet of any vehicle.

(10) Establish and maintain communications with the lead and trail vehicles.

(11) Ensure medical personnel are scheduled and posted in the rear of the convoy.

(12) Not assign a driver to drive an Army motor vehicle for more than 10 continuous hours, nor will the combined duty period exceed 12 hours in any 24-hour period without at least 8 consecutive hours of rest.

c. The senior ranking occupant of each vehicle will:

(1) Be responsible for the safe operation of the vehicle.

(2) Ensure before, during, and after PMCS is completed.

(3) Ensure vehicle basic issue items (BII) are present on every vehicle and tools, warning triangles, and fire extinguishers are present.

(4) Ensure radio whip antennas are tied down and covered with a protective ball at the tip.

(5) Ensure adequate seating arrangements for all vehicle occupants. Personnel will not ride on the outside of tracked or wheeled vehicles.

(6) Inspect the operator's OF 346 and DA Form 348 to ensure the operator is properly licensed and qualified to operate the vehicle.

(7) Ensure that all occupants use available restraint systems.

(8) Ensure personnel wear hearing protection as required by the type of vehicle.

(9) Prohibit headphones or earphones from being worn while driving Army motor vehicles.

(10) Enforce proper speed limits.

(11) Ensure ground guides are used when backing vehicles and when vision is restricted.

(12) Assist in posting reflective warning triangles along roadways to warn approaching motorists when the vehicle is halted or disabled in a location that might obstruct traffic.

d. Vehicle operators will:

(1) Not drive an Army motor vehicle for more than 10 continuous hours, nor will the combined duty period exceed 12 hours in any 24-hour period without at least 8 consecutive hours of rest.

(2) Complete PMCS before, during, and after operations.

(3) Ensure personnel are in a safe position, seated, and with safety restraints worn.

(4) Ensure all hatches are locked and secured.

7-3. Convoy Control Factors.

a. Convoys will be escorted by lead and trail vehicles equipped with rotating amber warning lights (RAWL) and two-way radios to maintain contact with each other. Personnel will not be transported in the trail vehicle, nor will the trail vehicle tow a trailer.

b. The convoy commander will designate the staging area and starting points with the help of movement control center personnel.

c. Vehicles with headlights, taillights, brake lights or turn signals not operational will be considered nonmission capable.

d. Vehicles not meeting safety requirements will not be allowed to move. Failure to follow instructions, or any unsafe

conditions, will cause the shut down of the operation until corrective actions are taken.

e. Track vehicles will be positioned at the rear of wheeled vehicles in a convoy. NOTE: Every effort will be made to convoy wheeled and tracked vehicles separately.

f. Vehicle drivers will maintain a minimum interval of 6 meters between vehicles when at the halt or when engines are idling. In designated training areas, tracked vehicles will halt in a herringbone or staggered formation if the terrain permits. For administrative parking, i.e., in a holding area, vehicles will be parked side by side or in a herringbone or staggered formation, but not bumper to bumper.

g. During daytime operations, a minimum interval of 5 meters will be maintained between vehicles in a convoy. Night convoy operations requiring blackout marker lights will maintain vehicle intervals as outlined in FM 21-305 or FM 21-306.

h. Vehicles do not have the right of way at road or rail crossings.

i. Oversized or overweight vehicles will be equipped with RAWLs visible to approaching and passing vehicles.

j. A senior occupant (at least SGT or higher) will ride in the lead and trail vehicles of a convoy.

k. Speed will be adjusted to the environmental conditions and weather conditions.

l. All vehicles will remain in single file throughout the movement. Passing while in a convoy is strictly prohibited unless passing a disabled vehicle. Pass a disabled vehicle with caution and at a reduced speed.

m. Disabled vehicles must be moved completely off the road. Warning triangles and flashers will be used to warn other traffic of a hazardous condition. Triangles will be a minimum of 100 meters to the front and rear of the disabled vehicle and highly visible to oncoming traffic.

CHAPTER 8
AMMUNITION AND EXPLOSIVES SAFETY PROGRAM

8-1. General. a. This chapter prescribes specific procedures and responsibilities to ensure safe handling and storage of ammunition and explosives on Fort Knox and at facilities supported by the Fort Knox Ammunition Supply Point (ASP). In the event of conflicting requirements between this regulation and the regulations of higher headquarters, the most stringent will be followed.

b. Pyrotechnics, ammunition, and explosives will not be used in the cantonment area except when approved by the ABSO.

8-2. Responsibilities:

a. Armor Branch Safety Manager will:

(1) Monitor installation operations for compliance with explosives safety standards.

(2) Be responsible for explosives storage licensing.

(3) Participate with DPW, G4/DOL, and the user in explosives site submissions and the layout preparation of new and revised storage facilities.

(4) Evaluate and process requests for explosives safety waivers and exemptions.

(5) Thoroughly staff explosives safety actions before forwarding to TRADOC to ensure that operational needs are satisfied.

(6) Conduct annual inspections of all ammunition supply points.

(7) Conduct random inspections of ammunition storage areas to verify compliance with explosives storage standards.

(8) Monitor ammunition uploads and other activities involving transportation and storage of ammunition.

(9) Assist tenant units and satellited facility managers with explosives safety program requirements.

(10) Review the Quality Assurance Specialist, Ammunition Supply (QASAS) quarterly inspection reports.

(11) Participate in the preparation of Department of Defense Explosive Safety Board (DDESB) submissions.

b. Director, G4/DOL will:

(1) Ensure ammunition is stored per the explosives storage license and applicable explosives safety requirements. Inform all tenant units and satellite facility commanders of the license limits for facilities they occupy.

(2) Notify the ABSO of conditions that require license modification, DDESB submissions, etc.

(3) Provide the following items for review upon request by personnel of the ABSO.

(a) A complete inventory by storage facility showing Department of Defense Activity Address Code nomenclature, quantity and total Net Explosive Weight (NEW).

(b) Current lightning protection system inspection report furnished by DPW. Inspections of all lightning protection systems are required every 14 months.

(c) Copy of work orders submitted for correction of safety deficiencies.

c. Director, DPW will:

(1) Test lightning protection systems of ammunition storage facilities as required by AR 385-64, chapter 7.

(2) Provide engineering support necessary to ensure explosives safety standards are met.

8-3. Pyrotechnics. The following policy will be adhered to when pyrotechnic simulators are used.

a. Restrict the issue, use, and handling of simulators to training officers and NCOs. Training will, as a minimum, include the proper use, hazards associated with, and the training value of blanks and simulators. Each device will be demonstrated to show how it functions and how unsafe employment may cause injury. Trainees and other untrained personnel will not handle simulators.

b. Ensure all personnel associated with an exercise in which simulators will be used receive a safety briefing beforehand on correct throwing procedures, potential hazards and precautions, and misfire and dud procedures.

c. Follow instructions provided by Muldraugh Ammunition Storage Area (MASA) when using the M115A2 Simulator, Ground Burst Projectile, since certain restrictions and constraints apply.

d. Within the U.S. Army Armor School (USAARMS), the following restrictions will apply:

e. The use of aerial pyrotechnics in Training Areas 11, 13, and 14 is prohibited.

f. All pyrotechnic use in the training complex will be coordinated with G3/DPTM, Range Division.

g. All dud pyrotechnics will be reported to G3/DPTM, Range Division.

(1) Tank Crew Instructors (TCI) will handle Hoffman devices and exploding type simulators.

(2) TCIs will control smoke grenades and flares, but Armor Officer Basic (AOB) students may ignite and throw.

(3) AOB students may handle blanks under direct supervision of the TCIs.

8-4. Blank Small Arms Ammunition. The following policy will be adhered to when firing blank small arms ammunition.

a. Bright red blank firing attachments will always be used.

b. The minimum safe distance for unprotected personnel from small caliber ammunition is 15 feet.

c. Approved single hearing protection will be worn.

d. During force-on-force training, approved eye protection will also be worn.

8-5. Smoke. The following precautions will be followed for all smoke training, including HC, HE, WP, PWP, fog, oil, RP, colored smoke, and diesel smoke.

a. Personnel participating in exercises which include the use of smoke will carry the protective mask.

b. Personnel will mask:

(1) Before exposure to any concentration of smoke produced by M8 white smoke grenades, smoke pots, or metallic powder obscurants.

(2) When passing through or operating in dense (visibility less then 50 meters) smoke such as smoke blankets and smoke curtains.

(3) When passing through or operating in a smoke haze (visibility greater than 50 meters) and the duration of exposure will exceed 4 hours.

(4) Anytime exposure to smoke produces breathing difficulty, eye irritation or discomfort. Such effects in one individual will serve as a signal for all similarly exposed personnel to mask.

(5) When using smoke during Military Operations in Urban Terrain (MOUT) training when operating in enclosed spaces. Care must be taken not to enter spaces where oxygen has been displaced because the protective mask is not effective in oxygen deficient atmospheres.

(6) Smoke generator personnel will mask when it is impossible to stay upwind of the smoke.

c. The use of smoke within the contonment area is prohibited.

8-6. Uniform Requirements for M1 Crewmen During Live-Fire Training. The following attire will be worn by M1 Series Tank crewmen during live-fire:

a. The standard CVC uniform consisting of Nomex coveralls, Nomex gloves, and the CVC helmet. If Nomex gloves are not issued, standard Army field gloves will be worn.

b. If Nomex coveralls and gloves are not available, the uniform will be BDUs with the shirt sleeves completely rolled down and buttoned. The top button of the BDU shirt will also be buttoned with collar turned up. Standard Army field gloves and the CVC helmet will also be worn with this uniform. While Nomex is clearly preferred, the BDU can be worn if the commander's risk assessment supports this action.

c. The old type coveralls may also be worn if Nomex coveralls are not available.

8-7. Fire Extinguishers. A minimum of two fire extinguishers will be on site where Hazard Class 1.1, 1.2, 1.3 explosives/ammunition is stored. One fire extinguisher will be on site where Hazard class 1.4 is stored.

CHAPTER 9
RAIL OPERATIONS

9-1. General. Trains are a primary means of transportation for vehicles and equipment during FTXs.

9-2. Responsibilities.

a. Unit Commander:

(1) Before beginning rail loading operations, unit commanders will ensure a risk assessment is conducted. Risk factors outlined in FM 55-21, C4, TM 55-2200-001-12, and FM 55-20 will be considered.

(2) Unit commanders will appoint a train commander to be responsible for overall supervision and coordination of the movement.

b. Train Commander:

(1) Must be thoroughly familiar with train movement procedures IAW FM 55-21, C4, TM 55-2200-001-12, and FM 55-20.

(2) Ensure care is taken to avoid damage to equipment, rail cars and rail property, and injury to personnel during operations.

(3) Ensure that all blocking, bracing, and lashing of equipment on the rail cars is per C4, TM 55-2200-001-12 or applicable service manuals. Particular attention must be devoted to positioning of tank guns and turrets and height of equipment on top of rail cars.

(4) Make certain that properly constructed spanners and tow-bars are available for use.

(5) Inspect lighting facilities at the railhead if rail cars are to be loaded at night. If lighting is inadequate, make arrangements for additional lights. If lighting is not available, rail loading and unloading will cease at sundown or dusk.

(6) Brief all personnel, involved in rail loading and unloading, on safety requirements and procedures.

(7) Determine if there are any special safety restrictions for a particular rail head.

(8) Ensure proper signals, such as blue flags to indicate

a working train, are used and that skid shoes are in place to prevent movement of rail cars being worked.

(9) Establish controls to assure only trained and qualified personnel operate vehicles and equipment on and off rail cars.

(10) Assure loading and unloading operating personnel are off and clear of rail cars before the cars move.

(11) Assure proper stowage and segregation of hazardous material per applicable directives.

9-3. Overhead Electrical Wires and Underground Conduits:

a. Carry up to 25,000 volts in and around rail yards and tracks.

b. Contact with, or placement of any metal object within 10 feet of these wires, could attract current from the wires and cause electrocution of personnel.

c. All antennae will be removed from a vehicle before loading on the rail car. Antennae will not be reinstalled until the vehicle has been unloaded from the rail car and moved away to a safe location.

d. Individuals climbing on equipment on rail cars must do so only when necessary and must have others observing.

9-4. Guides. Guides will be designated and used to move vehicles on or off a rail car. They will be instructed to:

a. Use proper hand signals.

b. Stay in view of the driver at all times.

c. Be positioned one rail car ahead of the rail car to be loaded or unloaded when directing drivers, except when a second or third vehicle is being placed on the rail car. The second and third vehicle will move forward only after the first vehicle has stopped completely.

d. Observe all safety precautions and not take any unnecessary risks.

e. Not walk backwards on the railcars. Guides moving vehicles onto rail cars will position themselves, guide the vehicle forward, stop the vehicle and reposition themselves, and then guide the vehicle forward.

f. Wear reflective vests.

9-5. Briefing. Before the start of actual operations, brief personnel to increase their awareness of accident-producing situations and to emphasize the following procedures:

a. Hazardous or unprofessional acts such as horseplay and venturing into unauthorized areas will not be tolerated.

b. There will no sleeping in, on, under, or around rail cars.

c. Guides will escort all vehicles on or off the rail cars.

d. All personnel will stay clear of rail tracks.

e. Personnel will not pass between, under, or over rail cars, either standing or moving.

f. Extreme caution will be taken when performing tasks near overhead power lines to assure adequate clearance.

g. Vehicles will not be driven backwards on or off the rail car.

h. Speed limits will be enforced in the rail yard and operating areas.

i. Running and jumping onto or off of railcars or from car to car is prohibited.

j. Personnel will wear kevlar helmets or industrial hard hats as well as leather gloves.

k. Military personnel participating in rail loading operations will remove Load Bearing Equipment (LBE).

CHAPTER 10
HAZARD IDENTIFICATION

10-1. General. The identification and correction of unsafe practices and unsafe physical conditions through safety inspections is essential to a successful accident prevention program.

10-2. Inspections. To properly direct efforts to eliminate the cause of accidental injuries and property damage, safety inspections must be conducted at all levels. Minimum requirements for safety inspections are as follows:

a. All personnel have a responsibility to report safety hazards and safety violations to their supervisor. Additional duty safety officers will inspect operations and facilities and record the results of the inspection on FK Form 4517-E (Quarterly Safety Inspection).

b. ABSO personnel will inspect work sites and facilities using the Standard Army Safety and Occupational Health Inspection (SASOHI) procedures described in AR 385-10. These inspections may be conducted with or without prior notification.

(1) A written report of deficiencies observed by ABSO during the inspection will be provided to the commander/director of the activity inspected. These reports will cite hazard severity, safety program achievements and deficiencies, and recommended corrective action. A copy of all surveys will be maintained by the ABSO.

(2) The unit or activity inspected will be required to respond to the ABSO in writing concerning corrective action taken on each cited deficiency within the time frame indicated on the inspection report. Follow-up procedures will be established by the unit to ensure each deficiency is corrected.

10-3. Abatement Plans. a. The establishment of abatement plans is required by 29 CFR Part 1960, Occupational Safety and Health Programs for Federal Employees. These plans are required by DOD and the U.S. Army for all violations in categories I through IIIB, requiring more than 30 days to correct.

b. DOD provides an internal channel for those situations where the most effective means to correct a hazardous situation may be through application of local alternate measures in place of OSHA Standards. The installation, after consultation with appropriate labor relations representatives, may petition through the chain of command to major command (MACOM) level for approval

of a variance which adopts a local alternate safety or health measure.

c. Violations often require abatement plans solely because preparing, processing, scheduling, and actually doing the work requires more than 30 days. For this reason, any safety hazard that requires a DPW work request to correct will be forwarded to the ABSO by the activity responsible for correcting the problem. The ABSO will assign a Risk Assessment Code (RAC) to the work request and forward it to DPW.

10-4. Reports of Unsafe or Unhealthful Working Conditions.

a. Reports of unsafe or unhealthful working conditions should be handled at the operational level whenever possible to ensure timely correction in the following order of priority:

(1) Oral reports directly to the supervisor.

(2) Reports through operational channels.

(3) Phone calls or memos to the ABSO.

(4) The Army Hazard Reporting System.

b. The Army Hazard Reporting System provides a route for personnel to bring complaints directly to the installation level, bypassing intermediate commands or supervisory elements.

(1) If an employee is not satisfied with the action taken to correct the alleged condition, they may make a written report to the Director, ABSO, on DA Form 4755 (Employee Report of Alleged Unsafe or Unhealthful Working Conditions). This form is available at the ABSO. Refer to DD Form 2272, DOD Safety and Occupational Health Protection Program (Poster), Feb 87, for reporting hazards.

(2) Reports submitted to the ABSO will be investigated per AR 385-10. Reports of alleged unsafe and unhealthful working conditions will be forwarded to the appropriate organization for response. Responses will be furnished to the ABSO within 7 working days.

(3) All DA personnel, both military and civilian, will be protected from coercion, discrimination, or reprisals for participating in the Army Safety and Occupational Health Program and exercising lawful occupational safety and health rights.

(4) Reports requesting anonymity will be handled per provisions of AR 385-10.

(5) Reports that appear to involve immediate life-threatening situations will be investigated immediately.

(6) All reports will be investigated by safety or health personnel. The originator, if known, will be notified of the results of the investigation in writing within 10 working days following receipt of the hazard report.

(7) If the originator is dissatisfied with the Safety Director's response, they may appeal to the Installation Commander who will review the findings and take appropriate action.

(8) If the originator is dissatisfied with the Installation Commander's response, they may appeal to HQ TRADOC, Director SAFE, ATTN: ATBO-S. The originator may further appeal to the Army designated Safety and Occupational Health Official and finally the DOD Designated Occupational Safety and Health Official, if appeals are rejected at any point in the chain.

(9) Personnel are encouraged not to bypass review levels prescribed above.

(10) Reviews will normally be completed within 20 workdays. Personnel are advised that if an appeal is not acted upon within 20 workdays, they may appeal to the next higher level for review.

CHAPTER 11
PROCEDURES FOR INSPECTING/MAINTAINING BLEACHERS

11-1. General. This chapter establishes the policy and procedures to be followed by organizations for safety inspection and maintenance of bleachers located on Fort Knox.

11-2. Responsibilities.

a. Armor Branch Safety Office (ABSO) will:

(1) Be the installation proponent for bleacher inspection policy.

(2) Provide training and assistance to subordinate units.

(3) Conduct an inspection of newly purchased bleachers in conjunction with the units inspection.

(4) Maintain an updated list of bleacher locations submitted by units/activities.

b. Unit or Activity Safety Officers will:

(1) Maintain a current list of bleacher locations for which they are responsible.

(2) Conduct an inspection of all bleachers assigned to the unit or activity prior to use, using FK Form 5012-E (Bleacher Inspection Checklist).

(3) Conduct an inspection of newly purchased bleachers in conjunction with an ABSO representative.

(4) Utilize the bleacher inspection checklist at appendix B. Checklists should remain on file for a period of 1 year from inspection date. Checklists are available at DOIM Publications, Building 43.

11-3. Procedures. a. All bleachers located on Fort Knox, (including schools, gyms, and field houses), fixed or real property, will be inspected semi-annually by the safety officer of that unit or activity having jurisdiction and property accountability. Checklist at appendix B will be utilized by inspectors.

b. Bleachers will be visually inspected to ensure that they are level, that there are no broken or missing cross braces, loose bolts, nuts, rotted, broken or splintered seat-boards or foot-boards, and all end caps are in place and riveted.

c. All loose bolts will be tightened.

d. Bleachers will be numbered with unit designation and bleacher number, i.e., Family Support Division bleachers - FSD1, FSD2, etc.

e. Bleachers identified unsafe will be tagged as such and immediately placed "off limits" to all personnel until repairs are accomplished and bleachers inspected and certified safe.

f. Installation of new bleachers will be accomplished by the users per the manufacturer's assembly instructions. Newly purchased bleachers will not be used until a safety inspection has been conducted and bleachers are date-stamped.

g. Bleachers moved or relocated to another area will not be used until a safety inspection has been conducted by the using unit or activity.

CHAPTER 12
PROTECTIVE CLOTHING AND EQUIPMENT (PCE)

12-1. General.

a. AR 385-10 authorizes the purchase and maintenance of PCE.

b. The ABSO, in conjunction with Preventive Medicine Service (PMS), will determine the need for PCE for any tasks or jobs not covered by other regulations. Requests will be submitted by memorandum to ATZK-S.

c. Areas where PCE is required will be appropriately marked.

12-2. Maintenance and Use.

a. PCE will be maintained in a sanitary and reliable condition.

b. Commanders and directors may initiate disciplinary action under the Uniform Code of Military Justice (UCMJ) against military personnel failing to use PCE. Guidance for disciplinary action against civilian personnel is provided in Fort Knox Pam 690-5.

12-3. Guide. Supervisors will enforce the use of PCE when required. Contact the ABSO for clarification of any questions on the use of PCE.

a. Eye and Face Protection.

(1) Protective eye and face equipment is required where there is a reasonable probability of injury that can be prevented by such equipment.

(2) Visitors as well as workers will wear protective eyewear suitable to guard against the hazard.

(3) Protective prescription eyewear will be procured through command channels per Fort Knox Reg 40-5.

(4) All eye protection must meet the requirements of the American National Standard Institute.

b. Foot Protection. Personnel exposed to potential foot hazards are required to wear safety footwear. Guidance for type of footwear required for specific occupations can be obtained from ABSO.

c. Head Protection.

(1) Personnel exposed to injury from falling or flying objects will wear protective headgear. Examples of jobs requiring head protection include: working on construction and demolition sites, areas where objects are stored above head level, and around power lines.

(2) Areas where objects project from the ceiling or wall in an egress path shall be removed, guarded, or visibly marked with yellow caution paint to prevent head injury.

d. Hearing Protection.

(1) Personnel exposed to noise hazardous environments (85 decibel (dB) or greater) must wear hearing protection per Fort Knox Reg 40-5. Ear plugs or muffs may be used to attenuate noise to an acceptable level. Some instances may require that both be worn simultaneously. For specific information about the type of protection required contact PMS, or the Hearing Conservation Center (HCC). Personnel exposed to hazardous noise on a routine basis must receive annual audiometric testing at the HCC.

(2) Areas that are noise hazardous must be visibly marked with signs stating the area is noise hazardous. Signs may be acquired at the ABSO.

12-4. Compliance. Supervisors will ensure personnel comply with the requirement to wear appropriate PCE. Failure to comply with this requirement may result in administrative actions as stipulated in "Table of Standard Penalties for Common Offenses" published in Fort Knox Pamphlet 690-5 and Article 44, Safety, Section 3, of the Collective Bargaining Agreement.

CHAPTER 13
SEVERE WEATHER

13-1. General. Each activity will be prepared to deal effectively with hazards associated with severe weather such as heat, cold, snow, ice, lightning, tornadoes, etc. Each activity will prepare a written plan for dealing with such hazards and will ensure all personnel are familiar with the plan. Appropriate training will be provided by supervisory personnel before each season.

13-2. Snow and Ice Conditions.

a. In the event of inclement or hazardous weather on Fort Knox, Fort Knox Reg 420-8 lists road condition classifications and requirements for vehicles traveling on roadways.

b. Ice and snow will be removed from walkways, steps, landings, docks, and ramps. Icicles, where they present a hazard to personnel, will be removed.

13-3. Tornadoes. The tornado safety rules contained in Fort Knox Tornado Warning Plan will be observed for maximum protection against tornadoes. The Fort Knox Tornado Warning Plan, published by G3/DPTM, will be available in each work area.

13-4. Earthquakes. The earthquake safety rules contained in the Fort Knox Earthquake Plan will be observed for maximum protection against earthquakes. The Fort Knox Earthquake Plan, published by G3/DPTM, will be available in each work area.

13-5. Lightning. Commanders and supervisors at all levels will ensure that all personnel are aware of the safety precautions to take before and during lightning storms. Precautions will be implemented before the storm begins.

a. Troop Precautions. In the event of an electrical storm, the following measures will be taken. Weather information is available at Range Control and local radio stations. Weather briefings will be given when the potential for severe weather exists.

(1) Radios will not be used nor will troops carry radios with antennas extended.

(2) Personnel will dismount from dozers, graders, and all other machinery and move approximately 100 yards away from equipment.

(3) Personnel will disperse, if caught in flat, open space, or on a bare hilltop.

(4) Troops will maintain a low profile if caught in an open, flat area. Troops will take shelter in dense woods, a grove of trees or a deep ravine. Weapons and radios will be stacked away from personnel.

(5) Individuals in an outside area should avoid hilltops, lone trees, flagpoles, fences, overhead wires, tents, small unprotected buildings in the open, and metallic objects such as artillery pieces and open top vehicles, to include canvas-topped vehicles. Personnel inside closed vehicles with steel tops generally are safe from lightning.

(6) When available, seek shelter in as large a building as possible. A well grounded metal frame building offers the most protection. When inside, stay away from electric wiring, fireplaces, stoves, showers, bathtubs, sinks, cold water pipes, and other possible conductors of electricity.

(7) If adequate cover is not available, personnel will drop to their knees and bend forward, putting hands on knees. Do not lie flat on the ground or place hands on the ground.

b. Command Protective Measures. In the event a warning is provided of an impending electrical storm or lightning strikes are observed within Fort Knox limits, the unit commander, officer or NCO in charge of training will:

(1) Cease all outside training immediately.

(2) Move personnel into a building if possible.

(3) Ensure that all weapons are cleared and stacked at least 50 yards away from personnel. If time is not available to stack weapons, weapons will be laid on the ground or on the firing line rifle rest within view of where troops will be located.

c. General Protective Measures. The following general rules apply during an electrical storm:

(1) Do not fish, play golf, or participate in activities that involve the use of metallic instruments in open spaces. It is extremely hazardous to ride tractors, golf carts, motorcycles, and bicycles during lightning storms.

(2) Do not swim, operate boats, or participate in any aquatic activities during electrical storms.

(3) The use of telephones and field radios during electrical storms will be held to a minimum. Lightning may be conducted through telephone lines.

(4) Playgrounds should immediately be evacuated to a safe area at the approach of, or during an electrical storm.

(5) Do not use plug-in electrical appliances such as hair dryers, razors, and televisions. All automation equipment should be unplugged during electrical storms.

CHAPTER 14
WATER SAFETY

14-1. Responsibilities. Commanders will:

a. Prepare water safety programs implementing policies and procedures per TC 21-21 and TRADOC Reg 385-2.

b. Identify military nonswimmers and provide swimming and water survival training per TC 21-21.

c. Establish written SOPs for tactical water operations per TC 21-21 and TRADOC Reg 385-2.

d. Conduct a thorough risk assessment of the training and forward the program of instruction (POI) to ABSO for review and concurrence or nonconcurrence.

14-2. Recreational Swimming.

a. All ponds and lakes on Fort Knox are off limits to swimmers. Swimming is allowed only in supervised swimming pools.

b. Rules and regulations of the Fort Knox community pools will be complied with by all swimmers and sunbathers within that particular pool area.

c. Maximum bather load for on-post pools are as follows:

(1) Pool 1, Building 1308 - 719.

(2) Pool 2, Building 2678 - 831.

(3) Pool 6, Building 7956 - 471.

(4) Pool 7, Building 5407 - 328.

(5) Brick Mess, Building 1138 - 268

(6) Water Park, Building 5542 - 520

(7) Gammon Field House, Bldg 850 - 149

d. All commanders, directors, and chiefs of staff offices will:

(1) Assure that water recreational activities they sponsor or control are supervised adequately.

(2) When possible, provide swimming instruction and water survival training for persons who engage in water recreational activities.

(3) Publicize off-limit areas for water operations and recreational activities within their geographical areas.

(4) Inform personnel of the hazards of swimming alone, in cold water, after drinking, during hours of darkness, or in unauthorized areas.

(5) Provide water safety briefings before the start of the swimming season.

(6) Assure prompt investigation and reporting of water-related accidents. Apply lessons learned.

CHAPTER 15
HOLIDAY SAFETY

15-1. General. Before each holiday period, commanders will ensure that all personnel receive a thorough safety briefing. The ABSO may be contacted if assistance is needed in the preparation of pre-holiday safety briefings. The ABSO has films, posters, and 5-minute safety talks which contain accident prevention information which commanders may want to have addressed in their briefings. Special emphasis on safe driving is necessary before weekends and holidays. All personnel should be oriented on the danger of driving during these periods of increased traffic flow.

15-2. Safety Measures. An effective holiday accident prevention program includes the following safety measures:

a. Releasing troops from duty after reveille to permit travel during daylight and periods of least congestion.

b. Encouraging and facilitating travel by commercial carrier especially on longer trips.

c. Encouraging predeparture checks of vehicles to ensure safe operating condition. This should be accomplished well in advance of the holiday to permit necessary corrective action. FK Form 4650-E (POV Inspection Checklist) will be used to conduct this inspection.

d. Conversations with drivers before departure to determine that their physical condition appears adequate for the demands of holiday driving.

e. Predeparture orientation of personnel concerning best routes, forecasts of weather and traffic conditions, traffic laws, and related data. The unit safety officer will arrange for compilation and presentation of this data.

f. Encourage troops to telephone the unit commander or first sergeant to request additional leave if delayed on return by legitimate or unforeseen circumstances. A leave extension may prevent accidents due to driver fatigue.

g. Conduct safety training sessions in advance of the holiday period.

15-3. Preholiday Training. Points to be stressed in training periods and preholiday safety publications include:

a. Reminders for traffic safety.

b. Observance of speed limits.

c. Dangers of driving while drinking, night driving, and driving when fatigued.

d. Wearing of seat belts per AR 385-55 and this regulation.

e. Safe vehicle condition.

f. Seasonal weather hazards, to include heat/cold injuries.

g. Safety with firearms.

h. Holiday fire hazards.

i. Recreational hazards appropriate to the area and the holiday season (i.e., swimming, boating, fishing, and hunting).

j. Dangers of carbon monoxide.

CHAPTER 16
AVIATION ACCIDENT PREVENTION

16-1. General. Aviation safety is a major sub-element of the installation commander's safety program. All activities and operations, whether on the ground or in the air, have the element of risk. Accidents, when they do occur, are usually highly visible and result in major damage and/or major trauma to the personnel involved as well as media attention. The overall Aviation Safety Program requires close coordination and cooperation among commanders, safety managers, supervisors, and assigned personnel.

16-2. Responsibilities:

a. Installation Safety Director will:

(1) Maintain safety oversight of airfield and unit safety programs.

(2) Provide safety training, education, and promotion.

(3) Ensure a Safety Specialist, GS-018, is assigned the responsibility of aviation safety to effect liaison between the ABSO, airfield, and unit safety elements in all aspects of safety and risk management.

b. Installation Aviation Safety Officer (IASO) will:

(1) Provide management oversight of airfield and unit aviation safety programs.

(2) Advise and assist commanders and safety officers in safety and risk management and assessment.

(3) Ensure the command safety program is integrated into all airfield activities.

(4) Assist assigned airfield and unit aviation safety officers (ASOs) in coordination with other staff agencies in the interest of safety.

(5) Respond to all aircraft and airfield emergencies and provide assistance in accident investigation and reporting.

(6) Guarantee a flow of information to ensure that all personnel are afforded the opportunity to attend required safety training courses and meetings.

(7) Conduct a semi-annual safety inspection of all airfield activities and operations.

(8) Monitor and risk assess all work orders concerning safety for airfield activities.

(9) Assist in hazard identification and elimination, follow-up to ensure recommended corrective action is taken.

(10) Attend all preconstruction and pre-performance conferences concerning construction and contractor work on the airfield or facilities.

(11) Research and interpret safety and occupational health policies and procedures.

(12) Collect and analyze accident experience and causes, disseminate data for training purposes.

(13) Review plans for proposed demonstrations, exhibits, exercises or contingencies to ensure the safety and health of Army personnel and the public.

(14) Assist in the establishment of risk management, assessment of high risk activities, and education of personnel on risk assessment.

(15) Maintain pertinent records and files to ensure continuity.

c. G3/DPTM Aviation Division Chief/Aviation Unit Commanders will:

(1) Ensure an integrated accident prevention awareness program to include all functional areas.

(2) Appoint a qualified ASO to manage the airfield/unit aviation safety program.

(3) Ensure that the IASO is included in the planning stage of demonstrations, exhibits, exercises, etc.

(4) Publish accident prevention directives and SOPs to provide instruction and enforcement of safety rules and principles for protection of personnel and equipment.

(5) Ensure an active Risk Assessment/Management Program is established and a copy of Risk Assessments maintained on file by the ASO.

d. Airfield/Unit Safety Officers will:

(1) Plan and organize the airfield or unit safety program per established directives.

(2) Support the ABSO in all areas of aviation safety, and ensure unit requirements are met in such areas as drivers education training programs, hazard communication awareness, participation in safety campaigns, etc.

(3) Maintain a close working relationship with the IASO concerning airfield requirements, construction, industrial shop safety, aircraft maintenance, and refueling.

(4) Furnish the ABSO copies of accident and incident investigations, inspections, safety meetings and hazard reports concerning ground operations and maintenance. Furnish action taken on selected Safety-of-Use Messages.

(5) Route all work orders concerning safety hazards through the ABSO for risk assessment and monitoring.

(6) Coordinate with supervisors and ABSO to ensure training needs of personnel are met.

(7) Coordinate all planned high risk operations, (i.e., hot refueling, field training exercises) with the ABSO.

16-3. Foreign Object Damage (FOD) Prevention:

a. Each unit will maintain a positive FOD program.

b. Rings/watches will not be worn while inspecting or maintaining aircraft. Tools will be inventoried and monitored to ensure their removal from the airfield.

c. All personnel visiting the airfield, personnel boarding (leaving or approaching) operating aircraft will be cautioned to remove and secure any "loose items" (hats, scarves, etc.) which could be ingested by the engines.

d. Kites, model aircraft, model rockets, etc., will not be flown in close proximity to the Godman Army Airfield/Taxiway or where their presence could pose a danger to operating aircraft. For example, areas in Keyes Park, by the Armor Inn, present a proximate danger to aircraft concerning the above activities.

16-4. Main Post Landing Areas. Any requests for helicopter landings in the cantonment area shall be coordinated with the Airfield Manager, Godman Army Airfield.

16-5. Range Operations. All flights into the airspace over the Fort Knox training complex require coordination with G3/DPTM, Range Operations. Pilots will thoroughly familiarize themselves with the range and impact area status and the proposed route of flight before flights into the training complex. No aircraft will enter impact area airspace without approval from Range Operations. All aircraft operating in the training complex will monitor the Range Control FM frequency 38.90.

16-6. Refueling Operations. All aircraft refueling will be accomplished per FM 10-68.

16-7. Munitions. Upload/download of aircraft munitions on Godman Army Airfield is prohibited, except for emergencies as addressed in Godman Army Airfield SOP.

CHAPTER 17
RESPIRATORY PROTECTION PROGRAM

17-1. General.

a. The provisions of adequate respiratory protection for personnel working in operations which release potentially toxic or nuisance contaminants into the air is a command responsibility.

b. Respirators are an acceptable method of protecting the health of employees under the following circumstances.

(1) Upon identification and evaluation of an operation which exposes personnel to toxic or nuisance airborne hazards.

(2) When no engineering or work practice controls can adequately control the hazard.

(3) During interim periods while engineering controls are being researched, designed, or installed to eliminate the hazard.

17-2. Responsibilities:

a. ABSO will:

(1) Manage the Respiratory Protection Program.

(2) Appoint a Safety Specialist as the Installation Respiratory Protection Specialist (IRPS) whose primary function will be:

(a) Respiratory program training.

(b) Respirator fit testing.

(c) The focal point for training records and all other matters concerning respiratory protection as outlined in Army regulations.

b. PMS, MEDDAC will:

(1) Provide ABSO a list of areas and operations requiring the use of respirators, the contaminant protected against, and type of respirator recommended. This document will be updated annually.

(2) Provide ABSO a copy of all shop and area sample surveys concerning respirator use, to include determination of sampling, recommendations, and type of respirator recommended.

(3) Advise and assist the IRPS as required by Army regulation.

(4) Provide medical evaluation and clearance for respirator use.

c. Commanders and directors will:

(1) Ensure the requirements outlined in established regulations for respiratory protection are adhered to.

(2) Exhaust all avenues of control, such as engineering controls, work practice control, substitution of less hazardous materials, or products before authorizing use of respirators.

(3) Ensure that workers required to use respirators are trained and fit tested.

(4) Ensure that each supervisor, of an area requiring use of respirators, develops an SOP for that operation. The SOP must be reviewed and approved by ABSO.

(5) Ensure proper respiratory protection is available and used where and when required.

(6) Appoint a responsible person to act as unit or activity respiratory representative.

d. Supervisors will:

(1) Ensure proper respiratory equipment is used where required and that employees adhere to proper use and maintenance requirements.

(2) Contact Industrial Hygiene Section, PMS to ensure each operation has been surveyed and sampled. If not, schedule a survey to determine the level of exposure and the type of protection needed.

(3) Ensure respirator users receive initial and periodic medical monitoring as recommended by the Occupational Health Physician.

(4) Ensure users are provided the appropriate equipment specified by the Industrial Hygienist (IH).

(5) Ensure adequate facilities are provided for cleaning, maintaining, and storage of respiratory equipment.

(6) Develop an SOP including all information necessary to select the proper respirator, and provide guidance on the use, care, and maintenance of the equipment.

(7) Inspect any self contained breathing apparatus on a monthly basis. (Checklist may be obtained from the Armor Branch Safety Office). Maintain a record of the inspection.

CHAPTER 18
SAFETY AWARDS PROGRAM

18-1. General. Commanders at all levels, directors, and chiefs of special staff sections are responsible for establishing procedures for implementing the Safety Awards Program. All commanders, directors, and chiefs will recognize their subordinate units/activities/divisions and individuals when contributions are made through safe, efficient, mission performance and accident prevention efforts. Various individual and unit awards are available and identified in AR 672-74. All awards will be coordinated through ABSO.

18-2. Unit Safety Awards.

a. Fort Knox Commanding General's Annual Unit Safety Award.

(1) This award will recognize major units and activities which most successfully perform the safety mission. A plaque and certificate will be awarded for superior safety performance.

(2) Program evaluation during Management Assistance Visits, conducted by the ABSO, and unit accident experience (previous fiscal year's experience as baseline) will serve as the basis for determining awards.

(3) Units must show improvement to receive an award consecutively.

b. DA Form 1118 (Certificate of Merit of Safety). Commanders at all levels will recognize safe performance displayed by units under their command through the use of DA Form 1118.

18-3. Individual Accident Prevention Awards.

a. Fort Knox Commanding General's Annual Unit Safety Officer and Noncommissioned Officer (NCO) Award. A safety officer and NCO will be selected annually for recognition for their excellence in performance of safety duties. Brigade commanders, directors, and chiefs of staff offices may submit one nomination annually to the ABSO not later than 31 October. Personnel nominated must have been assigned as an additional duty safety officer or NCO for at least 6 months. Submissions must address the safety officer's and NCO's involvement in the following:

(1) A unit safety inspection program to eliminate unsafe conditions and unsafe acts.

(2) A safety education and promotion program centered on identified problems.

(3) Unit safety council meetings.

(4) Investigation and reporting of accidents.

(5) Analysis of unit accident experience to determine problems and implementation of countermeasures.

b. DA Form 1118 or DA Form 1119 and 1119-1 (Certificate of Achievement in Safety). Commanders at all levels will recognize safe performance displayed by individuals under their command through the use of DA Form 1118 or DA Form 1119 and 1119-1. These certificates will be signed by the unit commander and will include, at a minimum, the awardee's name and the contribution for which the award is given.

c. Incentive Awards authorized by AR 672-20.

d. Driver and Mechanic Badge for military and civilian personnel as prescribed in AR 600-8-22.

e. Suggestions, superior accomplishment, and honorary awards as prescribed in AR 672-74.

18-4. Documentation. All safety awards will be documented in the individual's personnel file. Safe driving awards will be documented on the individual's DA Form 348.

18-5. Award Presentation. Awards will be presented to recipients at suitable ceremonies to emphasize management's concern to reduce vehicle and equipment damage and personal injury losses. Local publicity, through appropriate information media, will accompany the presentation of safety awards.

18-6. Special Awards. Commanders, directors, and chiefs are encouraged to establish special safety awards, locally procured or devised, for their activities and units per AR 672-74.

CHAPTER 19
BRANCH PROPONENCY

19-1. General. The Armor Branch Proponency Safety Program implements TRADOC policies and responsibilities for Branch Safety Proponency and focuses on integrating safety into all TRADOC mission functions, e.g., Doctrine, Training, Leader Development, Organizational Design, and Materiel Requirements (DTLOM).

19-2. Objectives. The objectives of the Armor Branch Proponency Safety Program (ABPSP) are to integrate safety into each phase of the force developments, training developments, and training processes. The program should identify hazards and risks up front and eliminate or control them through engineering or training. It includes the tracking of residual hazards and accident data and the incorporation of resulting lessons learned into future development efforts.

19-3. Responsibilities. For the purpose of this regulation, the responsibilities for the DTLOM mission functions are split between the Commandant, USAARMS and the Assistant Commandant, USAARMS. Organization and materiel are the responsibility of the Commandant, USAARMS. Doctrine, training, and leader development are the responsibility of the Assistant Commandant, USAARMS.

a. Commandant, USAARMS.

(1) Ensures implementation of appropriate provisions of AR 385-16 as they relate to the USAARMC mission functions of organization and materiel.

(2) Ensures that the Director of Force Developments (DFD) keeps the ABSO informed of safety issues associated with the organizational and materiel developments products and processes.

b. Assistant Commandant, USAARMS.

(1) Ensures implementation of appropriate provisions of AR 385-16 as they relate to the USAARMS mission functions of doctrine, training, and leader development.

(2) Is responsible for embedding safety in the training development process.

(3) Ensures that the training developers coordinate doctrine, training, and leader development safety issues with the ABSO.

(4) Assigns responsibilities and establishes effective procedures and policies to integrate safety into doctrine, training, and leader development by incorporating safety requirements in the total training developments process.

(5) Ensures stand alone safety instruction is conducted in leader development and other selected USAARMS courses.

(6) Designates risk acceptance decision authority consistent with level of risk being accepted for training related hazards.

c. Armor Branch Safety Manager:

(1) Serves as the control point of contact for Armor Branch safety matters. Refers actions to the appropriate agency for action and resolution.

(2) Has staff oversight for the integration of safety in combat developments, training developments, and training missions.

(3) Has responsibility for coordination of the ABPSP.

(4) Serves as technical advisor to the Commandant and the USAARMS staff for risk management and leader development safety awareness training.

(5) Establishes goals, plans, and objectives for the program in conjunction with appropriate USAARMC and USAARMS staff agencies.

(6) Provides the appropriate special staffing for the operation of the ABPSP.

(a) Armor Branch Safety Specialist (ABSS): Appropriate safety personnel (Safety and Occupational Health Specialist - GS-018) from the ABSO will be tasked with assisting USAARMS staff in evaluating safety in training.

(b) Armor System Safety Engineer (ASSE): Appropriate safety personnel (System Safety Engineer - GS-803) will be assigned with duty station in the DFD. Such personnel will be responsible to the Director, DFD, for the force developer portion of the materiel acquisition system safety program relating to Armor proponent items.

(7) Reviews and validates Risk Assessment Codes (RACs) for lesson plans developed by the school. As a minimum, reviews all extremely high, high and moderate level risk courses and training.

(8) Maintains coordination with the USAARMS and the Branch Liaison Office in the USASC.

(9) Tracks action responsibility to resolve branch safety issues and safety deficiencies.

(10) Assists and provides safety information on risk management, branch-unique hazard recognition, and accident prevention to evaluators, school instructors, cadre, and training developers.

(11) Coordinates branch safety issues, accident experience data, and lessons learned with materiel developers, USASC, TRADOC, and appropriate school elements for their input and use as necessary.

(12) Assists in dissemination of branch safety Essential Elements of Information (EEI), e.g. accident trends, specific Military Occupational Specialty (MOS) safety issues, risk management.

(13) Assists USAARMS in implementing the TRADOC resident Hazard Communication (HAZCOM) training program to students as required.

d. Armor Branch Safety Specialist:

(1) Monitors the integration of risk management into operations, training, and literature by conducting evaluations and reviewing school documents.

(2) Obtains updated information and statistics on accident trends from the Armor System Safety Engineer (ASSE) and provides to appropriate USAARMS staff for utilization in lesson plans.

(3) Evaluates professional leader development programs for adequacy of safety curriculum.

(4) Coordinates with specific subject matter experts and provides safety standards regarding branch training.

(5) Evaluates learning objectives for safety in the Training Support Packages (TSP) of school subcourses.

(6) Reviews safety and health considerations in USAARMS products, and recommends approval and/or changes to the Commandant.

(7) Evaluates selected course critiques and develops countermeasures to address criticisms of safety training.

(8) Assists USAARMS staff in tracking hazards associated with proponent training and materiel systems.

e. Armor System Safety Engineer:

(1) Serves as the technical expert on system safety engineering and management for the DFD.

(2) Implements the provisions of AR 385-16 relating to the force developer for all Armor proponent materiel systems.

f. DFD:

(1) Serves as the USAARMC proponent for AR 385-16 and ensures implementation of all force developer system safety engineering and management requirements relating to the USAARMC mission functions of organization and materiel as prescribed therein.

(2) Through a designated representative, provides guidance, tasking priorities, and supervision to the ASSE.

(3) Advises ABSO of actions and issues relating to the system safety mission.

(4) Provides appropriate force developer system safety feeder data, update information, and documentation to the ABSO.

g. Commanders of USAARMS training activities:

(1) Integrate safety standards/requirements, precautions, countermeasures, and lessons learned into courses of instruction, lesson plans, POIs, and appropriate literature.

(2) Ensure that training developers and instructors receive information on MOS specific hazards, and training on risk assessment techniques.

(3) Perform safety risk assessments during the Systems Approach to Training (SAT) design, development, and implementation phases. Assign lesson plan RACs using FK Form 5006-E (Lesson Plan Risk Assessment) and coordinate high and extremely high risk ratings with the ABSO. Maintain a copy of the assessment form in the class visitor's folder with the original in the class vault file. Delete all extremely high and high risk training tasks that are nonessential for attainment of the training objective.

(4) Ensure lesson outlines contain clear guidance for both instructors and students regarding the conduct of potentially hazardous training.

(5) Train to standard in accordance with approved curricula, and ensure that adequate instructors and safety observers, consistent with risk, are present at training sites.

(6) Include a stand alone block of safety instruction in leader development courses. Instruction should include an overview of the Army Safety Program, risk management, and MOS specific safety concerns.

(7) Conduct an evaluation of each course annually to ensure that task specific safety precautions are incorporated and addressed. Use the risk management process to identify those phases or tasks which have low, moderate, high, or extremely high risk, and implement appropriate measures to control risk.

(8) Integrate safety and occupational health requirements into training guidelines, techniques, curricula, and new equipment training.

CHAPTER 20
SPECIAL EMPHASIS AREAS

20-1. General. Areas of emphasis in units and activities will vary depending on the operation, degree of hazard, and operational difficulty. Such potential loss areas should be identified so effective controls can be instituted.

20-2. Motor Pool Operations and Maintenance Safety.

a. SOPs will be prepared, published, and posted in the work area covering each potentially hazardous operation such as, but not limited to:

(1) Painting.

(2) Using grease racks and pits.

(3) Tire changing and repair.

(4) Battery shops.

(5) Welding.

(6) Servicing brake linings and clutch pads.

(7) Maintenance shops.

(8) Respiratory protection.

(9) Hazard communication program.

(10) Radioactive materials.

b. Traffic flow in and around buildings will be carefully planned with emphasis on eliminating points of traffic conflict, blind corners, close clearances, etc. Ground guides will be used to direct vehicles in confined areas and when entering and exiting buildings. Parking and/or storage of vehicles will be avoided on sloping ground, inclines, and ramps when possible. Chock blocks will be used when vehicles are parked on an incline and when working on or under a vehicle.

c. Grease pits (not in use) will be protected by substantial barriers or pit covers.

d. Lights and electrically operated equipment used in pits or within 18 inches of the floor of any indoor vehicle servicing area will be explosion proof.

e. Containers or safety cans used to hold oil and grease-soaked rags will be painted red with a yellow band around the can or with the name of the contents conspicuously stenciled or painted on the can in yellow. Dispose of contents in accordance with environmental requirements.

f. Gasoline will not be used to clean parts, floors, pits, or other materials. Solvent tanks will be equipped with a self-closing lid or fusible link. Lids will be kept closed when tank is not in use. Solvent tanks will not be used unless an approved eyewash facility is available.

g. Air used for cleaning purposes will not exceed 30 pounds per square inch when nozzle is dead ended. Effective chip guarding (a cone of air which directs debris forward) will be provided and eye protection will be used.

h. Vehicle motors will be operated in a confined area only when necessary repairs or adjustments are being made. Adequate ventilation will be provided by use of exhaust systems, exhaust fans, or by using a tailpipe exhaust extension system which exhausts to the outside.

i. Vehicles jacked up or suspended by a chain hoist will be supported by jack stands or substantial wood blocking. Personnel will not get under vehicles supported by jacks or chain hoists. Maintenance will not be performed on vehicles or equipment, such as power packs, while suspended from a chain hoist.

j. Cranes and hoists will be operated only by trained and qualified personnel.

k. When inflating tires with split rims, the following safeguards will be employed:

(1) Inflation safety cages will be used.

(2) A lock-on air chuck with an extension air hose at least 10 feet long, with pressure gage located in the air hose at least 10 feet from the cage, will be used.

(3) Every individual involved in tire inflation operations will be trained in proper performance of the operation.

(4) All cages for airing multi-piece and single rim wheels will receive certification inspection from G4/DOL Maintenance Division.

l. Servicing brake linings and clutch pads may pose a serious hazard from airborne asbestos fibers. All such operations will be evaluated by an Industrial Hygienist and recommended protective measures will be followed.

m. All lifting devices, e.g. hoists, cranes, jacks, forklifts will be inspected, marked, load-tested and maintained per requirements of TB 43-0142 and 29 CFR 1910.66.

n. Painting operations are prohibited unless proper ventilation is provided.

20-3. Precautions Against Carbon Monoxide Poisoning. Carbon monoxide, produced by incomplete combustion of fuels, is a serious hazard in areas where fuel-burning devices are used with insufficient ventilation. To prevent injuries from carbon monoxide:

a. Commanders and activity chiefs, as applicable, will:

(1) Request surveys be performed by PMS to determine if a hazard from carbon monoxide exists within their areas of responsibility. Surveys should be made before the cold weather season in shops, warehouses, and other closed areas where combustible fuel is used. The interior of Army vehicles, cranes, and construction equipment using a combustible fuel will be checked for defective exhaust systems.

(2) Assure personnel are oriented concerning the hazards of carbon monoxide before the cold weather season.

b. Precautions will be taken to safeguard personnel against carbon monoxide gas poisoning from main and auxiliary engine exhaust and fuel burning personnel heaters while operating, servicing, or being transported in motor vehicles.

c. Exhaust systems will be checked for leaks monthly, and engines will not be allowed to idle for an extended time without adequate ventilation.

d. Vehicle drivers will not park any military or civilian vehicle with engines running merely to keep the vehicle or driver warm. If the engine is required to operate the radio or for other tactical reasons, vehicles will be ventilated and drivers will be required to dismount periodically.

20-4. Electrical Hazards.

a. Only trained and qualified personnel will perform work on electrically-powered equipment and facility electrical systems.

Defective electrical wiring, downed wires, and other electrical hazards should be reported to DPW for correction.

b. Flag poles, radio masts, metallic ladders, and similar objects will not be erected or dismantled where the possibility of contact with energized circuits exists. Masts, towers, and antennas will be installed at least twice the height of the structure from power lines.

20-5. Machine Safety. Rings, other jewelry, loose clothing, and unbound hair will not be worn when working around moving machinery, during vehicle maintenance or during other hazardous industrial operations.

20-6. Slipping/Tripping Hazards. All aisles, passageways, stairs, sidewalks, and other walking surfaces will be free of slipping or tripping hazards.

20-7. Non-Standard Training. a. Units planning to conduct non-standard training will submit detailed plans to the ABSO for review and comment before implementing the training.

b. The plans submitted for review will include as a minimum, a description of the training to be conducted, site location, references used to develop the training plan, and a risk assessment of the training.

20-8. Hazard Communication (HAZCOM) Program.

a. Commanders, directors, and chiefs, staff offices/departments will ensure:

(1) An individual is appointed on orders to coordinate the HAZCOM Program within their organization. A copy of the additional duty appointment will be provided the ABSO.

(2) The written program, the organization's hazardous chemical inventory, and applicable Material Safety Data Sheets (MSDS) are readily available for personnel working with hazardous chemicals and that all chemical containers are properly labeled.

(3) Initial HAZCOM training for newly assigned military/civilian personnel is scheduled by contacting ABSO.

(4) An SOP is prepared covering the use of chemical compounds, safe handling procedures, and PCE.

b. Detailed HAZCOM requirements are contained in Fort Knox Reg 385-1.

20-9. Radiation Protection Program.

a. Commanders, directors, and chiefs, staff offices/departments will ensure:

(1) The Nuclear Regulatory Commission's philosophy to keep personal exposure to radioactive material to As Low As Reasonably Achievable (ALARA) is incorporated into their radiation safety program.

(2) A unit radiation protection officer (RPO) is appointed per AR 385-11. Commanders will comply with training requirements for all RPOs.

(3) Unit RPOs and alternates will attend the quarterly Installation Radiation Control Committee (IRCC) meeting.

(4) The Installation Radiation Protection Officer (IRPO) is notified of any movement of radioactive material/equipment on or off the installation.

(5) The following documents or publications are posted at all locations which store, handle, or utilize radioactive material:

(a) Nuclear Regulatory Commission (NRC) Form 3 (not required if under Department of the Army Radiation Authorization (DARA) Permit, i.e. Explosives Ordnance Detachment x-ray).

(b) Radiation sign w/tri-foil: "CAUTION, RADIOACTIVE MATERIALS".

(c) Fort Knox Radiation Safety Program Poster.

(d) Public Law 93-438.

(e) Isotope specific SOPs.

(6) Compliance with the following mandatory procedures for handling tritium devices:

(a) Personnel are adequately trained.

(b) Acceptable storage areas are established and surveyed quarterly.

(c) Emergency procedures are incorporated into local SOPs.

b. Contractors and tenants will comply with applicable Army regulations. Contractors are required to obtain a DARA permit through ABSO to use equipment containing radioactive sources on this installation.

c. Detailed radiation safety requirements can be obtained from the IRPO, ABSO.

20-10. Bulletin Boards. a. The following items will be posted in the "Permanent" section of military and civilian bulletin boards:

(1) Commander's Safety Policy memorandum.

(2) Department of Defense Occupational Safety and Health Protection Program Poster (DD Form 2272).

(3) Inventory of all hazardous chemicals/materials and location of MSDSs.

b. The following items will be posted in the "Current" section of military bulletin boards:

(1) Drinking and Driving Memorandums (post for a period of 30 days from date of issue).

(2) Fatality Memorandums (post for a period of 30 days from date of issue).

c. Information distributed in the Quarterly Safety Officer Kits should be displayed on bulletin boards.

d. In addition to accident material being posted, safety Posters will be strategically placed throughout the area. Posters are available from the ABSO. Posters designed by members of the unit and oriented toward unit needs are normally more effective than stock posters and should be used whenever possible.

20-11. Bloodborne Pathogens. The Department of Labor, OSHA, has enacted a federal law designed to protect health care personnel and emergency responders against occupational exposure to bloodborne pathogens in infectious materials. Specific concern is given to protection against Hepatitis B and the Human Immunodeficiency Virus (HIV) that causes Acquired Immunodeficiency Syndrome (AIDS). All personnel, who are at risk of occupational exposure, are required to be trained on the bloodborne pathogens' standard, provided personal protective equipment, and be offered the Hepatitis B vaccine. Bloodborne Pathogen requirements are contained in Fort Knox Reg 385-4.

20-12. Color Coding. The marking of hazards and painting of safety equipment will be in accordance with OSHA regulations. When there is a conflict with the Installation Paint and Color Plan, safety regulations will prevail.

APPENDIX A
REQUIRED PUBLICATIONS

1. AR 11-34, 15 Feb 90, The Army Respiratory Protection Program.

2. AR 385-9, 1 Apr 82, Safety Requirements for Military Lasers.

3. AR 385-10, 23 May 88, Army Safety Program.

4. AR 385-11, 1 May 80, Ionizing Radiation Protection (Licensing, Control, Transportation, Disposal and Radiation Safety).

5. AR 385-14, 8 Apr 91, Transportation Accident Prevention and Emergency Response Involving Conventional Munitions and Explosives.

6. AR 385-15, 15 Oct 79, Water Safety.

7. AR 385-16, 3 May 90, System Safety Engineering and Management.

8. AR 385-26, 10 Oct 67, Use of Explosives and Pyrotechnics In Public Demonstrations, Exhibitions and Celebrations.

9. AR 385-40, 1 Nov 94, Accident Reporting and Records.

10. AR 385-55, 12 Mar 87, Prevention of Motor Vehicle Accidents.

11. AR 385-60, 1 Jan 82, Coordination with Department of Defense Explosives Safety Board.

12. AR 385-61, 28 Feb 97, The Army Chemical Agent Safety Program.

13. AR 385-62, 5 Jan 77, Regulations for Firing Guided Missiles and Heavy Rockets for Training, Target Practice, and Combat.

14. AR 385-63, 15 Oct 83, Policies and Procedures for Firing Ammunition for Training, Target Practice and Combat.

15. AR 385-64, 22 May 87, Ammunition and Explosives Safety Standards.

16. AR 385-65, 15 Apr 83, Identification of Inert Ammunition and Ammunition Components.

17. AR 385-95, 20 May 91, Army Aviation Accident Prevention.

18. AR 600-55, 31 Dec 93, The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing).

19. AR 672-74, 28 Apr 95, Army Accident Prevention Awards Program.

20. AR 700-141, 1 Jul 97, Hazardous Material Information System (HMIS).

21. DA Pam 385-3, 3 May 76, Protective Clothing and Equipment.

22. TC 21-21, 25 Jun 91, Water Survival Training.

23. TB 43-0142, 28 Feb 97, Safety Inspection and Testing of Lifting Devices.

24. FM 21-17, 11 Dec 81, Driver Selection, Training, and Supervision, Track Combat Vehicle.

25. FM 21-305, 27 Aug 93, Manual for the Wheeled Vehicle Driver.

26. FM 21-306, 15 Apr 83, Manual for the Track Combat Vehicle Driver.

27. Fort Knox Reg 40-5, 22 Sep 92, Preventive Medicine.

28. Fort Knox Reg 385-1, 28 Nov 90, Hazard Communication Program.

29. Fort Knox Reg 385-2, 12 Dec 94, Respiratory Protection Program.

30. Fort Knox Reg 385-3, 25 Sep 91, Lockout/Tagout of Hazardous Energy Sources.

31. Fort Knox Reg 385-4, 12 Oct 93, Bloodborne Pathogen Program.

32. Fort Knox Reg 385-22, 6 May 85, Range Regulation (Training/Impact Areas).

Related Publications

1. AR 15-6, 11 May 88, Procedures for Investigating Officers and Boards of Officers.

2. AR 40-4, 1 Jan 80, Army Medical Department Facilities/ Activities.

3. AR 40-5, 15 Oct 90, Preventive Medicine.

4. AR 40-10, 1 Oct 91, Health Hazard Assessment Program in Support of the Army Materiel Acquisition Decision Process.

5. AR 40-66, 20 Jul 92, Medical Records Administration.

6. AR 55-162, 1 Jan 79, Permits for Oversize, Overweight, or Other Special Military Movements on Public Highways in the United States.

7. AR 58-1, 15 Dec 79, Management, Acquisition and Use of Administrative Use Motor Vehicles.

8. AR 75-1, 20 Aug 93, Malfunctions Involving Ammunition and Explosives.

9. AR 190-5, 8 Jul 88, Motor Vehicle Traffic Supervision.

10. AR 190-40, 30 Nov 93, Serious Incident Report.

11. AR 190-45, 30 Sep 88, Law Enforcement Reporting.

12. AR 195-2, 30 Oct 85, Criminal Investigation Activities.

13. AR 420-90, 10 Sep 97, Fire and Emergency Services.

14. AR 600-8-22, 25 Feb 95, Military Awards.

15. AR 750-10, 1 Dec 82, Modification of Materiel and Issuing Safety-of-Use Messages and Commercial Vehicle Safety Recall Campaign Directive.

16. TB MED 502, 15 Feb 82, Occupational and Environmental Health Respiratory Protection Program.

17. TB MED 523, 15 Jul 80, Control of Hazards to Health from Microwave and Radio Frequency Radiation and Ultrasound.

18. TB MED 524, 20 Jun 85, Occupational and Environmental Health: Control of Hazards to Health from Laser Radiation.

19. FM 9-43-2, 3 Oct 95, Recovery and Battlefield Damage Assessment and Repair.

20. FM 10-68, 29 May 87, Aircraft Refueling.

21. FM 10-69, 22 Oct 86, Petroleum Supply Point Equipment and Operations.

22. FM 10-71, 12 May 78, Petroleum Tank Vehicle Operations.

23. FM 55-20, 31 Oct 86, Army Rail Transport Units and Operations.

24. FM 55-30, 27 Jun 97, Army Motor Transport Units and Operations.

25. TM 55-2200-001-12, Nov 92, Transportability Guidance for Application of Blocking, Bracing, and Tiedown Materials for Rail Transport.

26. EM 385-1-1, 1 Oct 92, U.S. Army Corps of Engineers Safety and Health Requirements Manual.

27. DODI, 5400.7, Oct 90, DoD Freedom of Information Act Program.

28. DODI, 6055.4, 22 Nov 94, DOD Traffic Safety Program.

29. 10 CFR 19, Energy - Nuclear Regulatory Commission: Notices, Instructions and Reports to Workers: Inspection and Investigations.

30. 10 CFR 20, Energy - Nuclear Regulatory Commission: Standards for Protection Against Radiation.

31. 10 CFR 21, Energy - Nuclear Regulatory Commission: Reporting of Defects and Non-Compliance.

32. 29 CFR 1910, Labor - Occupational Safety and Health Administration.

33. 29 CFR 1960, OSHA, Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters.

34. Fort Knox Pam 690-5, 28 Mar 83, A Guide for Supervisors of Civilian Employees.

BLEACHER INSPECTION CHECKLIST

For use of this form, see Fort Knox Reg 385-10; the proponent is ATZK-S.

UNIT :	DATE:
BLEACHER ID # :	LOCATION:

	YES	NO
1. General:		
a. Are the bleachers on level ground?		
b. Are the bleachers leaning to one side?		
c. When walking on the bleachers, do they feel unstable in any way?		
2. Structural supports:		
a. Are there any signs of corrosion or rot?		
b. Are there any damaged, loose, or missing cross braces?		
c. Do any braces protrude past the bench seat edges?		
d. Are any welds cracked?		
3. Seat and foot boards:		
a. Do seat and foot boards protrude over 20 inches from end of frames?		
b. Are all seat and foot boards present and securely fastened?		
c. Are all nuts and bolts present and tight?		
d. Are any seat and foot boards abnormally bowed?		
e. Are seat and foot boards splintered, cracked, or termite and insect infested?		
4. Are bleachers four or more risers high equipped with standard handrails?		
5. If no handrail, is the top seat and a 4 inch strip on open sides of bleacher painted yellow?		

INSPECTOR'S PRINTED NAME:
SIGNATURE:
DUTY POSITION:

APPENDIX C
RISK MANAGEMENT

1. Risk management is a five-step cyclic process that is easily integrated into the decision-making process; it doesn't have to be a separate consideration, and shouldn't be.

2. A risk assessment is part of risk management. It can range from simple to complex. A risk assessment causes leaders to place identified hazards and threats in perspective relative to the task at hand. Logically, hazards must be identified before the level of risk is determined.

3. The risk management process consists of the following steps:

a. The first step in risk management is to identify the hazards or factors that may adversely affect mission accomplishment. Hazard identification must take place during mission planning to be effective.

b. The second step is to assess the hazards to determine their cumulative effect on the mission. Use FK Form 5008, USAARMC and Fort Knox Mission Risk Assessment, to assess hazards and determine level of risk. The result of the assessment will provide an overall level of risk: extremely high, high, moderate, or low.

c. The third step is to develop controls and make a risk decision. Most of the time the mission must be accomplished, so leaders must decide the safest way to do it. The following will be used to determine risk acceptance decision authority.

(1) Extremely High Risk missions require approval by the installation commander and TRADOC commander.

(2) High Risk missions require approval by the installation commander.

(3) Moderate Risk missions require approval by the unit commander. This authority can be subdelegated to a lower level with the Brigade/Regimental Commanders approval.

(4) Low Risk missions require approval by the first line leader.

d. Step four is to implement the controls established as a result of steps one through three. This is where commanders, supervisors and other leaders take steps to eliminate or reduce hazards. Controls may be as substantial as writing a SOP or as simple as conducting a safety briefing.

e. Step five is to supervise. Supervision here is more than just ensuring that people do their job, it also means following up and continuously evaluating. It means fine tuning the operation to accommodate unforeseen issues and incorporating lessons learned.

4. Lesson plan risk assessment. The risk management process will be used to evaluate each lesson plan used in the Armor School. Fort Knox Form 5006 will be used to record information and a copy attached to each lesson plan. Lesson plans with no risk do not require a Fort Knox Form 5006 to be attached; however it should be annotated on the lesson plan that it was evaluated for safety considerations. A training developer, instructor, or subject matter expert will:

a. Review each lesson plan, identify and assess hazards of each task, and identify countermeasures to either eliminate risk or reduce risk to an acceptable level.

b. Determine if the training can be accomplished at an acceptable level of risk.

c. Make a recommendation to the decision maker whether or not to accept residual risk that cannot be eliminated.

d. Modify training with unnecessary risk to an acceptable level.

Lesson plans with an Extremely High or High level of risk require approval by the TRADOC commander and the installation commander respectively. Moderate risk approval authority will be by the unit commander, this authority can be subdelegated to a lower level with the Brigade/Regimental Commanders approval. Low risk approval authority will be by the first line leader.

POV INSPECTION CHECKLIST

For use of this form, see Fort Knox Reg 385-10; the proponent is ATZK-S.

OWNER/OPERATOR'S NAME: _____

UNIT: _____ DUTY PHONE: _____

YEAR/TYPE VEHICLE: _____ MILEAGE: _____

ITEM		SAT	UNSAT	REMARKS
LIGHTS	a. Headlights			
	b. Taillights			
	c. Backing lights			
	d. Emergency flashers			
	e. Turn signal indicators			
	f. Brake lights			
GLASS	a. Windshield			
	b. Rear window			
	c. Rear-view mirror			
EXHAUST SYSTEM				
WINDSHIELD WIPERS/WASHERS				
HORN				
STEERING SYSTEM				
BRAKE SYSTEM	a. Driving brakes			
	b. Emergency brake			
TIRES (including spare and changing equipment)				
SUSPENSION SYSTEM/SHOCK ABSORBERS/SPRINGS				
OVERALL RATING				

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1. PRIVATELY OWNED VEHICLE (4-WHEEL)

	YES	NO
a. Valid Driver's License	____	____
b. Valid State Registration	____	____
c. Valid Post Registration	____	____
d. Proof of Insurance	____	____
e. Successfully completed AAC	____	____
f. Safety Belts Present and Operational	____	____
g. Is this the only vehicle you own?	____	____
h. (Only if Item 1g is NO) Is this the vehicle you intend to drive during the holiday period?	____	____

2. PRIVATELY OWNED VEHICLE (2-WHEEL)

a. Valid Operator's License	____	____
b. Valid State Registration	____	____
c. Valid Post Registration	____	____
d. Proof of Insurance	____	____
e. Successfully completed AMSC	____	____
f. Helmet, DOT Approved	____	____
g. Safety Gear: Eye Protection, Full-fingered gloves, long trousers, long-sleeved shirt or jacket, high-visibility garmets (bright color for day and retro-reflective for night), leather boots or over-the-ankle shoes	____	____

DATE INSPECTED: _____ INSPECTOR: _____

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